HISTORY INFORMATION FOR THE FOLLOWING MANUAL:

SERVICE MANUAL AA-2W CHASSIS

MODEL NAME	DESTINATION	REMOTE COMMANDER	CHASSIS NO.
KV-32FS10	U.S.	RM-Y168	SCC-S32B-A
KV-32FS10	CND	RM-Y168	SCC-S33B-A
KV-36FS10	U.S.	RM-Y168	SCC-S32C-A
KV-36FS10	CND	RM-Y168	SCC-S33C-A
KV-36FS10	HAWAII	RM-Y168	SCC-S32HA
KV-32FV15	U.S.	RM-Y171	SCC-S32D-A
KV-32FV15	CND	RM-Y171	SCC-S33D-A
KV-34FV10	E	RM-Y168	SCC-S34E-A
KV-34FV15	E	RM-Y171	SCC-S34F-A
KV-34FV15C	E	RM-Y171	SCC-S34G-A
KV-34FV15K	KOREA	RM-Y149A	SCC-S31B-A
KV-34FV15T	TAIWAN	RM-Y171	SCC-S36A-A
KV-36FV15	U.S.	RM-Y171	SCC-S32G-A
KV-36FV15	CND	RM-Y171	SCC-S33G-A
KV-36FV15	HAWAII	RM-Y171	SCC-S32JA
KV-38FV15K	KOREA	RM-Y149A	SCC-S31C-A
KV-34FX250C	E	RM-Y170	SCC-S34H-A
KV-38FX250	E	RM-Y170	SCC-S34M-A
KV-38FX250C	E	RM-Y170	SCC-S34J-A
KV-38FX250T	TAIWAN	RM-Y170	SCC-S36B-A
KV-32XBR250	U.S.	RM-Y170	SCC-S32E-A
KV-32XBR250	CND	RM-Y170	SCC-S33E-A
KV-36XBR250	U.S.	RM-Y170	SCC-S32F-A
KV-36XBR250	CND	RM-Y170	SCC-S33F-A
KV-36XBR250	HAWAII	RM-Y170	SCC-S32KA

ORIGINAL MANUAL ISSUE DATE: 5/1999

ALL REVISIONS AND UPDATES TO THE ORIGINAL MANUAL ARE APPENDED TO THE END OF THE PDF FILE.

REVISION DATE	REVISION TYPE	SUBJECT
5/1999	No revisions or updates are applicable at this time.	
	Correction-1	A Board Schematic - Critical Component Identified.
	Correction-2	IC002 Part Number Correction
	Correction-3	G Board Schematic Correction
	Correction-4	Correction to Set-up Adjustments
	Correction-5	A Board Schematic Correction
	Correction-6	Addition of Hawaiian models; IC001 Part Number Correction; Addition of ITC Assembly Part Number for Hawaiian models.
	Correction-7	Tuner and Terminal labels for rear cover must be ordered separately using the part numbers provided.
	Supplement-1	HZ Board, Picture Tube View, and Electrical Parts List Update
	Correction-8	IC643 Part Number Correction

SERVICE MANUAL

AA-2W CHASSIS

MODEL	DEST.	COMMANDER	CHASSIS NO.
KV-32FS10	U.S.	RM-Y168	SCC-S32B-A
KV-32FS10	CND	RM-Y168	SCC-S33B-A
KV-36FS10	U.S.	RM-Y168	SCC-S32C-A
KV-36FS10	CND	RM-Y168	SCC-S33C-A
KV-32FV15	U.S.	RM-Y171	SCC-S32D-A
KV-32FV15	CND	RM-Y171	SCC-S33D-A
KV-34FV10	E	RM-Y168	SCC-S34E-A
KV-34FV15	E	RM-Y171	SCC-S34F-A
KV-34FV15C	E	RM-Y171	SCC-S34G-A
KV-34FV15K	KOREA	RM-Y149A	SCC-S31B-A
KV-34FV15T	TAIWAN	RM-Y171	SCC-S36A-A
KV-36FV15	U.S.	RM-Y171	SCC-S32G-A
KV-36FV15	CND	RM-Y171	SCC-S33G-A
KV-38FV15K	KOREA	RM-Y149A	SCC-S31C-A
KV-34FX250C	E	RM-Y170	SCC-S34H-A
KV-38FX250	E	RM-Y170	SCC-S34M-A
KV-38FX250C	E	RM-Y170	SCC-S34J-A
KV-38FX250T	TAIWAN	RM-Y170	SCC-S36B-A
KV-32XBR250	U.S.	RM-Y170	SCC-S32E-A
KV-32XBR250	CND	RM-Y170	SCC-S33E-A
KV-36XBR250	U.S.	RM-Y170	SCC-S32F-A
KV-36XBR250	CND	RM-Y170	SCC-S33F-A

KV-36XBR250

RM-Y170

MICROFILM

TRINITRON® COLOR TV

SONY®

SPECIFICATIONS

	KV-32FS10	**KV-32FV15 *KV-32XBR250	**KV-34FV10 **KV-34FV15 **KV-34FV15C **KV-34FV15K **KV-34FV15T *KV-34FX250C	KV-36FS10	**KV-36FV15 *KV-36XBR250	**KV-38FV15K *KV-38FX250 *KV-38FX250C *KV-38FX250T
Power Requirements	120V,60Hz	120V,60Hz	120-220V,50/60Hz	120V,60Hz	120V,60Hz	120-220V,50/60Hz
Number of inputs/outputs						
Video 1)	3	3	3	3	3	3
S Video 2)	2	2	2	2	2	2
Y, P_B, P_R 3)	1	1	1	1	1	1
Audio 4)	3	3	3	3	3	3
Audio Out 5)	1	1	1	1	1	1
Monitor Out	1	1	1	1	1	1
TV Out 1) 4)	1	*1/**-	*1/**-	-	*1/**-	*1/**-
S-Link	-	YES	YES	-	YES	YES
Speaker output (W)	10W x 2	15W x 2	15W x 2	10W x 2	15W x 2	15W x 2
Power Consumption (W)						
In use (Max)	190W	200W	200W	190W	200W	200W
In Standby	2W	2W	2W	2W	2W	2W
Dimensions (W/H/D)						
(mm)	882 x 687 x 592 mm			975 x 757 x 633 mm		
(in)	34 3/4 x 27 x 23 1/4 in			38 3/8 x 29 13/16 x 24 15/16 in		
Mass						
(kg)	80 kg			107 kg		
(lbs)	176 lbs			236 lbs		

Television system
American TV standard, NTSC

Channel coverage
VHF:2-13 / UHF:14-69 / CATV:1-125

Picture tube
FD Trinitron® tube

Visible screen size
32-inch picture measured diagonally (KV-32FS10, 32FV15, 32XBR250, 34FV10, 34FV15, 34FV15C, 34FV15K, 34FV15T, 34FX250C)
36-inch picture measured diagonally (KV-36FS10, 36FV15, 36XBR250, 38FX250, 38FX250C, 38FX250T, 38FV15K)

Actual screen size
34-inch picture measured diagonally (KV-32FS10, 32FV15, 32XBR250, 34FV10, 34FV15, 34FV15C, 34FV15K, 34FV15T, 34FX250C)
38-inch picture measured diagonally (KV-36FS10, 36FV15, 36XBR250, 38FX250, 38FX250C, 38FX250T, 38FV15K)

Antenna
75 ohm external antenna terminal for VHF/UHF

Supplied accessories
Remote control RM-Y149A (KV-34FV15K, 38FV15K)
Remote control RM-Y168 (KV-32FS10, 34FV10, 36FS10)
Remote control RM-Y170 (KV-32XBR250, 34FX250C, 36XBR250, 38FX250, 38FX250C, 38FX250T)
Remote control RM-Y171 (KV-32FV15, 34FV15, 34FV15C, 34FV15T, 36FV15)
Battery size AA (R6) w/2

Design and specifications are subject to change without notice.

Notes:

1) 1 Vp-p 75 ohms unbalanced, sync negative

2) Y: 1 Vp-p 75 ohms unbalanced, sync negative
C: 0.286 Vp-p (Burst signal), 75 ohms

3) Y: 1.0 Vp-p, 75 ohms, sync negative; P_B: 0.7 Vp-p, 75 ohms;
P_R: Vp-p, 75 ohms

4) 500 mVrms (100% modulation), Impedance: 47 kilohms

5) More than 408 mVrms at the maximum volume setting (variable)
More than 408 mVrms (fix); Impedance (Output): 2 kilohms

Optional accessories

Connecting Cables:
RK-74A, VMC-810/820/830HG, VMC-10HG/30HG, VMC-720M, VMC-810S/820S, YC-15V/30V, YC-15/30HG, RK-G69HG, RKC-515HG
TV Stand: SU-32FD2, SU-36FD2, SU-32XBR2, SU-36XBR2
UV Mixer: EAC-66

(●) ® SRS (SOUND RETRIEVAL SYSTEM)

The (●) SRS (SOUND RETRIEVAL SYSTEM) is manufactured by Sony Corporation under license from SRS Labs, Inc. It is covered by U.S. Patent No. 4,748,669. Other U.S. and foreign patents pending.

The word 'SRS' and the SRS symbol (●) are registered trademarks of SRS Labs, Inc.

BBE and BBE symbol are trademarks of BBE Sound, Inc. and are licensed by BBE Sound, Inc. under U.S. Patent No. 4,638,258 and 4,482,866.

TABLE OF CONTENTS

Section *Title* *Page*

Warnings and Caution 3
Safety Check Out Instructions 4

1. GENERAL

Connecting and Installing the TV 5
Basic Set Up 7
Using Your TV 7
Using the Wireless Headphones 8
Using Your Menus 9
Operating Video Equipment 12
Operating a Cable Box or DBS Receiver 12
Troubleshooting 13

2. DISASSEMBLY

2-1. Rear Cover Removal 14
2-2. Chassis Assembly Removal 14
2-3. Service Position 15
2-4. Multi-Button Switch Removal........ 15
2-5. Picture Tube Removal 16

3. SET-UP ADJUSTMENTS

3-1. Beam Landing 17
3-2. Convergence 18
3-3. Focus 20
3-4. Screen (G2) 20
3-5. White Balance Adjustments 20

4. SAFETY RELATED ADJUSTMENTS 21

5. CIRCUIT ADJUSTMENTS 22
5-1. Method of Setting the Service Adjustment Mode 22
5-2. Memory Write Confirmation Method 22
5-3. Adjust Buttons and Indicator 22
5-4. Service Data 23

Section *Title* *Page*

6. DIAGRAMS

6-1. Block Diagram (1/5) 31
6-2. Block Diagram (2/5) 34
6-3. Block Diagram (3/5) 37
6-4. Block Diagram (UY PIP) (4/5) 40
6-5. Block Diagram (UX PIP) (5/5) 41
6-6. Circuit Boards Location 42
6-7. Printed Wiring Boards and Schematic Diagrams 42
- A Board 43
- A Board Schematic Diagram 45
- AK Board 49
- C Board 53
- G Board 55
- GA Board 57
- HA Board 57
- HB Board 57
- HX Board 59
- T Board 59
- UX Main Board 61
- UX PIP Board 65
- UY Main Board 69
- UY PIP Board 73
- WA Board 75

6-8. Semiconductors 77

7. EXPLODED VIEWS

7-1. Chassis 78
7-2. Chassis 80
7-3. Picture Tube 81

8. ELECTRICAL PARTS LIST

- Parts Listings 83

WARNINGS AND CAUTIONS

CAUTION!

AFTER REMOVING THE ANODE, SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT.

WARNING!!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS. THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL FOR SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

ATTENTION!

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

ATTENTION!!

AFIN D'EVITER TOUT RESQUE D'ELECTROCUTION PROVENANT D'UN CHÁSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE. LE CHÁSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ À L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS A LA SECURITE!!

LES COMPOSANTS IDENTIFIES PAR UNE TRAME ET PAR UNE MARQUE ⚠ SUR LES SCHEMAS DE PRINCIPE, LES VUES EXPLOSEES ET LES LISTES DE PIECES SONT D'UNEIMPORTANCE CRITIQUE POUR LA SECURITE DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMERO DE PIECE EST INDIQUE DANS LE PRESENT MANUEL OU DANS DES SUPPLEMENTS PUBLIES PAR SONY. LES REGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SECURITE DU FONCTIONNEMENT SONT IDENTIFIES DANS LE PRESENT MANUEL. SUIVRE CES PROCEDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONTIONNEMENT SUSPECTE.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are “pinched” or contact high-wattage resistors.
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
6. Check the line cords for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the B+ and HV to see if they are specified values. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.
8. Check the antenna terminals, metal trim, “metallized" knobs, screws, and all other exposed metal parts for AC Leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampere). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instructions.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low voltage scale. The Simpson's 250 and Sanwa SH-63Trd are examples of passive VOMs that are suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

HOW TO FIND A GOOD EARTH GROUND

A cold-water pipe is guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth-ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms. If a cold-water pipe is not accessible, connect a 60-l00 watts trouble light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side of the line, the lamp should light at normal brilliance if the screw is at ground potential. (See Fig. B)

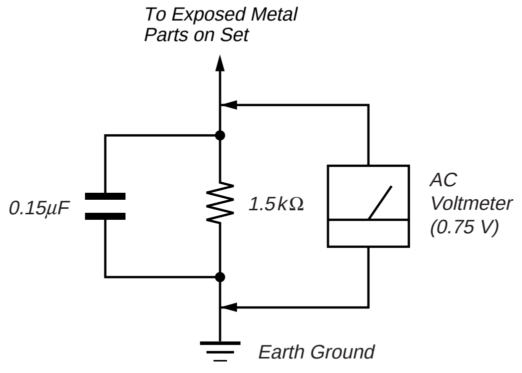


Fig. A. Using an AC voltmeter to check AC leakage.

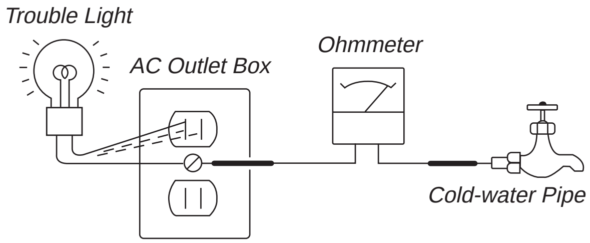


Fig. B. Checking for earth ground.

SECTION 1 GENERAL

The instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers shown reflect those of the Operating Instruction Manual.

Connecting and Installing the TV

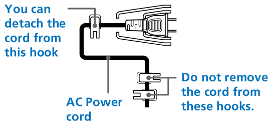
Making Connections

Refer to the table below, it will direct you to the diagram suitable to the equipment you will be connecting.

If you will be connecting	See page
Cable or antenna only	3
Cable and antenna	3
Cable box	4
Cable box and cable to view scrambled channels	4
VCR and cable or antenna	5
VCR and cable box	5
Two VCRs for tape editing	6
Satellite Receiver	7
VCR and Satellite Receiver	7
DVD Player	8
DVD Player with component video output connectors	8
Audio system	9
Camcorder to view tapes	9
CONTROL S	10
VCR using S-Link	11
Satellite Receiver using S-Link	11

Note about the AC Power Cord

The AC power cord is attached to the rear of the TV with hooks. Use caution when removing the AC plug from its holder. Gently slide the cord in the upward direction, without removing the cord from the two lower hooks.

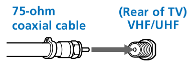

You can detach the cord from this hook
AC Power cord
Do not remove the cord from these hooks.

Cable or Antenna Connections

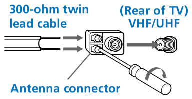
Connecting directly to cable or an antenna

The connection you choose will depend on the cable found in your home. Newer homes will be equipped with standard coaxial cable (see **A**); older homes will probably have 300-ohm twin lead cable (see **B**); still other homes may contain both (see **C**).

A
- VHF only
  or
- VHF/UHF
  or
- Cable


75-ohm coaxial cable
(Rear of TV)
VHF/UHF

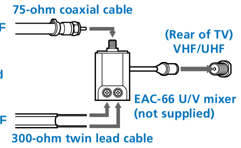
B
- VHF only
  or
- UHF only
  or
- VHF/UHF


300-ohm twin lead cable
(Rear of TV)
VHF/UHF
Antenna connector

C
- VHF

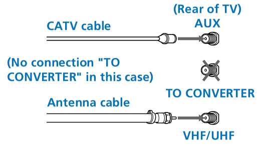
and

- UHF


75-ohm coaxial cable
(Rear of TV)
VHF/UHF
EAC-66 U/V mixer (not supplied)
300-ohm twin lead cable

Cable and antenna

If your cable provider does not feature local channels, you may find this set up convenient.


(Rear of TV)
AUX
CATV cable
(No connection "TO CONVERTER" in this case)
TO CONVERTER
Antenna cable
VHF/UHF

Select CABLE or antenna (ANT) mode by pressing **ANT** on the remote control.

Note

In order to receive channels with an antenna, you will need to turn your CABLE to OFF and perform the AUTO PROGRAM function, (see page 23).

Connecting and Installing the TV (continued)

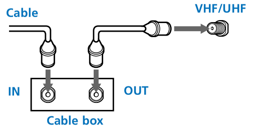
Cable Box Connections

Some pay cable TV systems use scrambled or encoded signals that require a cable box to view all channels.

Cable box

1 Connect the coaxial connector from your cable to the IN on your cable box.
2 Using a coaxial cable, connect OUT on your cable box to VHF/UHF on your TV.

If you will be controlling all channel selection through your cable box, you should consider using the CHANNEL FIX feature, (see page 23).


Cable
(Rear of TV)
VHF/UHF
IN
OUT
Cable box

Cable box and cable

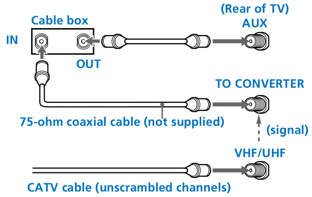
For this set up, you can switch between scrambled channels (through your cable box), and normal (CATV) channels by pressing **ANT** on your remote control.

Notes
- Your Sony remote control can be programmed to operate your cable box, (see page 31).
- When using PIP, you cannot view the AUX input in the window picture.

Tip

*Pressing **ANT** switches between these inputs.*

If you are connecting a cable box through the AUX input and would like to switch between the AUX and normal (CATV) input you should consider using the CHANNEL FIX feature, (see page 23).


Cable box
IN
OUT
(Rear of TV)
AUX
TO CONVERTER
75-ohm coaxial cable (not supplied)
(signal)
VHF/UHF
CATV cable (unscrambled channels)

VCR Connections

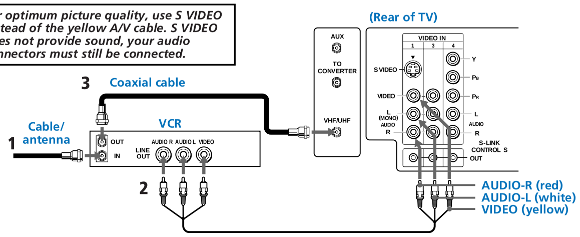
Connecting an antenna/cable TV system with a VCR

1 Attach the coaxial connector from your cable or antenna to IN on your VCR.
2 Using A/V connectors, connect AUDIO and VIDEO OUT on your VCR to AUDIO and VIDEO IN on your TV.
3 Using a coaxial connector, connect OUT on your VCR to VHF/UHF on your TV.

Tip

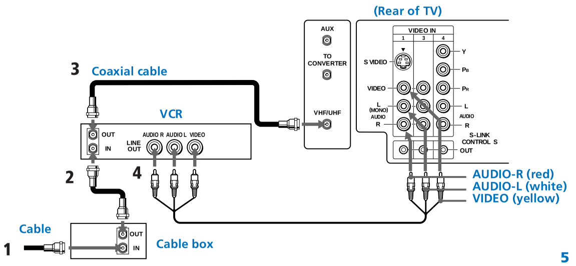
If you are connecting a monaural VCR, connect only the single white audio output to the left input on your TV.

For optimum picture quality, use S VIDEO instead of the yellow A/V cable. S VIDEO does not provide sound, your audio connectors must still be connected.


(Rear of TV)
3
Coaxial cable
Cable/ antenna
1
VCR
2
OUT
IN
LINE OUT
AUDIO R AUDIO L VIDEO
AUX
TO CONVERTER
VHF/UHF
VIDEO IN
S VIDEO
VIDEO
L (MONO) AUDIO R
S-LINK CONTROL S OUT
AUDIO-R (red)
AUDIO-L (white)
VIDEO (yellow)

Connecting a VCR and TV with a cable box

1 Connect the coaxial cable from the wall to IN on your cable box .
2 Using a coaxial connector, connect OUT on your cable box to IN on your VCR.
3 Connect a coaxial cable (not supplied) from the OUT jack on your VCR to VHF/UHF on your TV.
4 Using A/V connectors, connect AUDIO and VIDEO OUT on your VCR to AUDIO and VIDEO IN on your TV.


(Rear of TV)
3
Coaxial cable
VCR
2
4
Cable
1
Cable box
OUT
IN
AUX
TO CONVERTER
VHF/UHF
VIDEO IN
S VIDEO
VIDEO
AUDIO-R (red)
AUDIO-L (white)
VIDEO (yellow)

Connecting and Installing the TV (continued)

Connecting two VCRs for tape editing

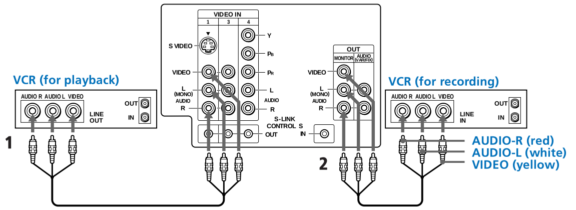
MONITOR OUT gives you the ability to use a second VCR to record a program being played by the primary VCR or to perform tape editing and dubbing.

1 Connect the VCR intended for playback using the connection instructions on page 5 of this manual.
2 Using A/V connectors, connect AUDIO and VIDEO IN on your VCR intended for recording to MONITOR AUDIO and VIDEO OUT on your TV.

Note

You cannot record signals from equipment connected to the Y, PB, PR input.

To perform tape editing; set the TV to the video input intended for playback by pressing TV/VIDEO.

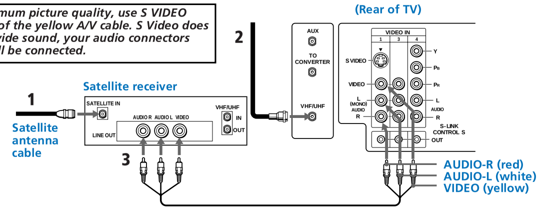

(Rear of TV)
VCR (for playback)
VCR (for recording)
1
2
AUDIO-R (red)
AUDIO-L (white)
VIDEO (yellow)

Satellite Receiver Connections

Connecting a satellite receiver

1 Connect the cable from your satellite antenna to SATELLITE IN on your receiver.
2 Attach the coaxial connector from your cable or antenna to VHF/UHF on your TV.
3 Using A/V connectors, connect AUDIO and VIDEO OUT on your receiver to AUDIO and VIDEO IN on your TV.

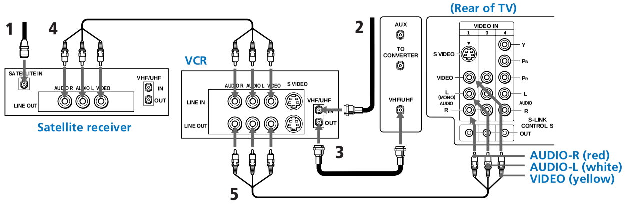
For optimum picture quality, use S VIDEO instead of the yellow A/V cable. S Video does not provide sound, your audio connectors must still be connected.


(Rear of TV)
Satellite receiver
Satellite antenna cable
1
2
3
AUDIO-R (red)
AUDIO-L (white)
VIDEO (yellow)

Connecting a satellite receiver and a VCR

1 Connect the cable from your satellite antenna to SATELLITE IN on your receiver.
2 Attach the coaxial connector from your cable or antenna to IN on your VCR.
3 Using a coaxial connector, connect OUT on your VCR to VHF/UHF on your TV.
4 Using A/V connectors, connect AUDIO and VIDEO OUT on your receiver to AUDIO and VIDEO IN on your VCR.
5 Using A/V connectors, connect AUDIO and VIDEO OUT on your VCR to AUDIO and VIDEO IN on your TV.

Pressing TV/VIDEO on the remote control will allow you to view from the satellite receiver or VCR.

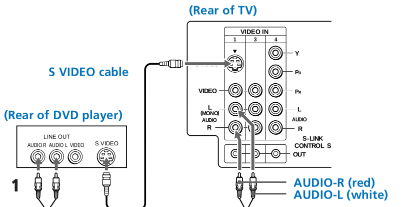

(Rear of TV)
VCR
Satellite receiver
1
2
3
4
5
AUDIO-R (red)
AUDIO-L (white)
VIDEO (yellow)

Connecting and Installing the TV (continued)

DVD Player Connections

Connecting a DVD Player

1 Using audio connectors, connect AUDIO OUT on your DVD player to AUDIO IN on your TV.
2 Using an S VIDEO cable, connect S VIDEO on your DVD player to S VIDEO on your TV.


(Rear of TV)
S VIDEO cable
(Rear of DVD player)
1
AUDIO-R (red)
AUDIO-L (white)

Connecting a DVD Player with component video output connectors

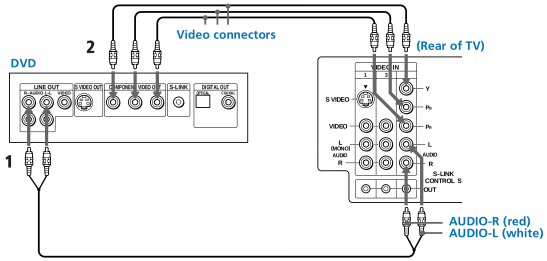
Except KV-27FV15

This connection option offers the highest quality DVD picture.

1 Using AUDIO connectors, connect AUDIO R and L of the LINE OUT on your DVD player to AUDIO R and L on the VIDEO IN 4 panel at the rear of your TV.
2 Using three VIDEO connectors, connect Y, PB, and PR on the COMPONENT VIDEO OUT on your DVD player to Y, PB, and PR on the VIDEO IN 4 panel at the rear of your TV.

Note

Some DVD player terminals may be labeled Y, CB, and CR, or Y, B-Y, and R-Y. If so, connect them by matching the colors.

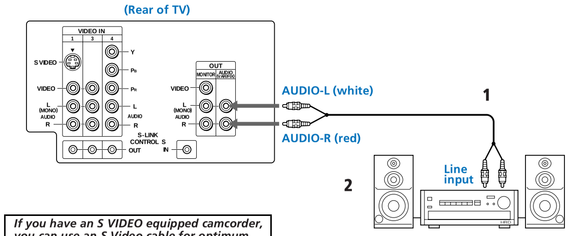

DVD
Video connectors
(Rear of TV)
1
2
AUDIO-R (red)
AUDIO-L (white)

Additional Connections

Connecting an audio system

For an enhanced sound, connect your audio system to your TV.

1 Using AUDIO connectors, connect AUDIO OUT on your TV to one of the unused Line inputs (e.g. Tape-2, AUX1, etc.) on your stereo.
2 Set your stereo to the chosen Line input and use the AUDIO ♪ menu to set your audio output, (see page 20).


(Rear of TV)
AUDIO-L (white)
AUDIO-R (red)
Line input
1
2

Connecting a camcorder

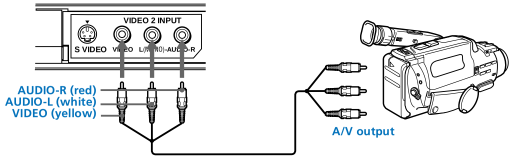
This connection is convenient for viewing a picture directly from your camcorder.

Using A/V connectors, connect AUDIO and VIDEO OUT on your camcorder to AUDIO and VIDEO IN on your TV.

Tip

If you are connecting a monaural camcorder, connect only the single white audio output to the left input on your TV.

If you have an S VIDEO equipped camcorder, you can use an S Video cable for optimum picture quality.


VIDEO 2 INPUT
S VIDEO
AUDIO-R (red)
AUDIO-L (white)
VIDEO (yellow)
A/V output

Connecting an A/V receiver

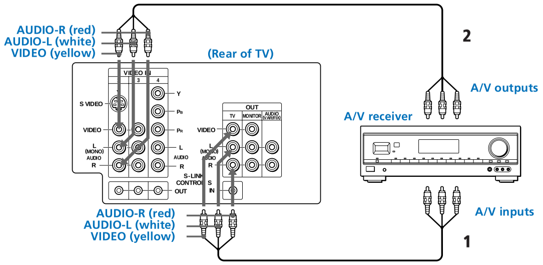
1 Using A/V cables, connect TV OUT on your TV to TV IN on your A/V receiver.
2 Using A/V cables, connect A/V OUT on your receiver to VIDEO IN on your TV.

Note

If you will be connecting your A/V receiver to external speakers, you do not need to connect AUDIO OUT on your A/V receiver to AUDIO IN on your TV.

Tip

You may want to use CHANNEL FIX to fix your TV's input to the A/V receiver (VIDEO 1). (see "CHANNEL SET UP" on page 26)


(Rear of TV)
AUDIO-R (red)
AUDIO-L (white)
VIDEO (yellow)
A/V receiver
A/V outputs
A/V inputs
1
2

Using Special Sony Features

Using the CONTROL S feature

CONTROL S allows you to control your TV and other Sony equipment with one remote control.

Using the supplied CONTROL S cable, connect CONTROL S IN on your Sony equipment, (e.g. VCR) to CONTROL S OUT on your TV.

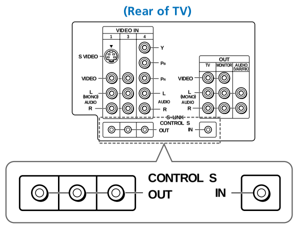
Tip

You can also program your remote control to operate other equipment, (see page 34).

Using the Vertical Compression feature

These models use a feature called “vertical compression” to achieve maximum picture quality on widescreen sources, including selected DVDs. This feature compresses the height of each line for a higher resolution of the picture.

To enjoy this feature, set your Sony DVD player to 16:9 mode. The widescreen source will be automatically detected and displayed with maximum picture quality.


(Rear of TV)
VIDEO IN
S VIDEO
VIDEO
L (MONO) AUDIO R
OUT
S-LINK CONTROL S
CONTROL S
OUT
IN

Connecting S-Link to a VCR

KV-27FV15, 32FV15, 36FV15 only

S-Link automatically powers on the TV and switches to the correct video input when a tape is inserted in the VCR.

1. Using A/V connectors, connect AUDIO and VIDEO OUT on your VCR to AUDIO and VIDEO IN on your TV.
2. Using an S-Link connector (mono mini plug), connect S-LINK on your VCR to S-LINK/CONTROL S-OUT in the same VIDEO IN column on your TV.

Connecting S-Link to a satellite receiver

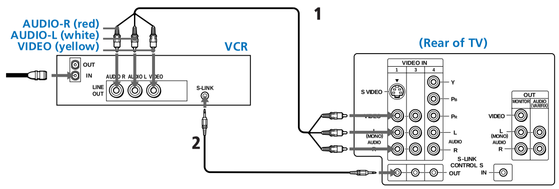
KV-27FV15, 32FV15, 36FV15 only

When you power on the satellite receiver , S-Link automatically powers on the TV and switches to the correct video input.

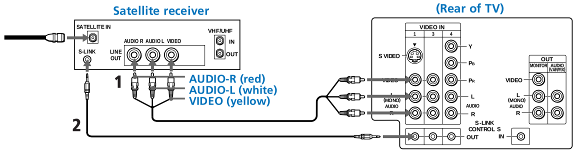
1. Using A/V connectors, connect AUDIO and VIDEO OUT on your satellite receiver to AUDIO and VIDEO IN on your TV.
2. Using an S-Link connector (mono mini plug), connect S-LINK on your satellite receiver to S-LINK/CONTROL S-OUT in the same VIDEO IN column on your TV.

Note

The S-Link feature will override the “SKIP” VIDEO LABEL input, (see page 22).


AUDIO-R (red)
AUDIO-L (white)
VIDEO (yellow)
VCR
1
2
(Rear of TV)
OUT
IN
LINE OUT
AUDIO R AUDIO L VIDEO
S-LINK
VIDEO IN
S VIDEO
VIDEO
AUDIO
S-LINK CONTROL S
OUT
IN

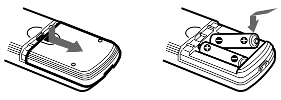
The S-Link connector must be in the same VIDEO-IN column as the connected A/V cables.


Satellite receiver
SATELLITE IN
S-LINK
LINE OUT
AUDIO R AUDIO L VIDEO
VHF/UHF
IN
OUT
AUDIO-R (red)
AUDIO-L (white)
VIDEO (yellow)
1
2
(Rear of TV)
VIDEO IN
S VIDEO
S-LINK CONTROL S
OUT
IN

Basic Set Up

Inserting batteries

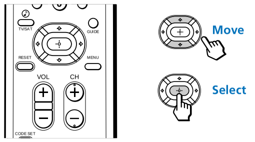
Insert two size AA (R6) batteries (supplied) by matching the + and – on the batteries to the diagram inside the battery compartment.



Notes

- Remove the batteries to avoid damage from possible battery leakage whenever you anticipate that the remote control will not be used for an extended period.
- Handle the remote control with care. Avoid dropping it, getting it wet, or placing it in direct sunlight, near a heater, or where the humidity is high.
- Your remote control can be programmed to operate most video equipment, (see page 29).

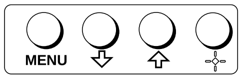
Using the remote control move & select buttons


TV/SAT
GUIDE
RESET
MENU
VOL
CH
CODE SET
Move
Select

The supplied remote control has "arrow" buttons (⬆, ⬇, ⬅, ➡) which allow for movement of the on-screen (▶) cursor. Pressing on the outer buttons will cause the cursor to *move* in the corresponding direction. Pressing the center button (⊕) will *select* the item.

Front panel menu control

The front panel menu controls allow access to the on-screen menus without the use of a remote control. Pressing the **MENU** button will bring up the on-screen menus. The arrow buttons, (⬆,⬇) move the on-screen cursor in the menus and the (✧) button selects the menu item.



Using Your New TV

Setting up the TV automatically

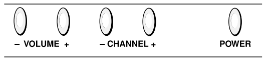
After you have finished connecting your TV, you will want to run AUTO PROGRAM to set up your channels.

The AUTO PROGRAM feature does not apply for installations that use a cable box for all channel selection.

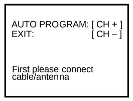
Tips

- *Perform this function during the day, with the antenna and/or cable properly connected, to ensure that all available channels will be broadcasting and receivable.*
- *If your cable or antenna is connected to AUX, press* ***ANT*** *until AUX appears next to the channel number.*

Using the buttons on the top of the TV:


– VOLUME +
– CHANNEL +
POWER

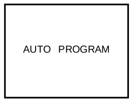
1. Press POWER to turn on the TV.
   The initial setup screen appears.



AUTO PROGRAM: [CH +]
EXIT: [CH –]

First please connect cable/antenna

2. Press CH + to run AUTO PROGRAM or press CH – to exit.



AUTO PROGRAM

Tip

To reset your TV to factory settings, turn the TV on. Then, while pressing the ***RESET*** *button on your remote control, press the* ***POWER*** *button on your TV. The TV will turn itself off, then back on.*

Using Your New TV (continued)

Watching the TV

The following chart explains more advanced buttons on your remote control.

REFER TO THE ILLUSTRATION OF THE REMOTE CONTROL ON THE INSIDE FRONT COVER OF THIS MANUAL AS YOU REVIEW THIS CHART

Using the White Labeled Buttons for TV Operations	
VTR/DVD SAT/CABLE POWER TV	Press when you want to turn connected equipment on and off.
FUNCTION VTR/DVD SAT/CABLE TV	Press when you want to control connected equipment with your remote control, (see pages 29-31 for instructions on programming your remote control).
0 - 9	Use for direct channel selection. Press **0-9** to select a channel, the channel will change after 2 seconds, or you can press **ENTER** for immediate selection.
PICTURE MODE	Cycles through the VIDEO MODE settings: VIVID, SPORTS, MOVIE, STANDARD.
JUMP	Alternates back and forth between the last two channels selected with the **0-9** keys.
MUTING	Instantly turns off the sound. Press again or press **VOL** + to restore sound.
SLEEP	Turns the TV off in approximately 30, 60, or 90 minutes. Cancel by pressing until SLEEP OFF appears.
RESET	Press to return to factory settings while in the on-screen menus.

Using the White Labeled Buttons for TV Operations	
DISPLAY	Press once to display current time (if set) and channel number. Press again to activate current CAPTION VISION setting. To cancel, press **DISPLAY** until DISPLAY OFF appears.
TV/VIDEO	Press repeatedly to cycle through available video inputs: TV, VIDEO 1, VIDEO 2, VIDEO 3 and VIDEO 4
ANT *(AUX input)*	Press to change the VHF/UHF input to the AUX input.
TV/VTR +	Press when you are finished using a VCR and you want to switch to the TV input. Your VCR power will remain on.
MTS/SAP	Cycles through the Multi-channel TV Sound (MTS) options: STEREO, SAP (Second Audio Program), MONO (see page 20).
SYSTEM OFF	Powers off all Sony equipment at once. *This feature may not work with older Sony equipment.*
♪ TV/SAT	Cycles through the available audio settings.

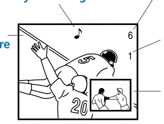
Using Your New TV (continued)

Using Picture-in-Picture – PIP

KV-27FV15, 32FV15, 36FV15 only

These models are equipped with dual tuners. This means that PIP is "ready to use".

REFER TO THE ILLUSTRATION OF THE REMOTE CONTROL ON THE INSIDE FRONT COVER OF THIS MANUAL AS YOU REVIEW THIS CHART


Indicates which channel is currently receiving sound
Channel number of the main picture
Main picture
Channel number of the window picture
Window picture
6
1
20

Notes

- You must press **TV** (FUNCTION) before you can control PIP with the yellow labeled buttons.
- The AUX input cannot be viewed in the window picture.

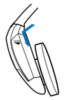
Use the Yellow Labeled Buttons for PIP Operations	
PIP	Displays the window picture. Press again to decrease the size. To cancel, press until the window picture turns off.
TV/VIDEO	Cycles through available video inputs: TV, VIDEO 1, VIDEO 2, VIDEO 3, VIDEO 4
AUDIO	Alternates sound between the main picture and the window picture. A ♪ will appear to indicate which picture is receiving sound.
TV/VTR + CH -	Changes the channel in the window picture.
POSITION	Moves the location of the window picture.
FREEZE	Press to freeze the window picture. Press again to restore the picture.
SWAP	Switches the position of the main picture with the window picture.

Using the Wireless Headphones

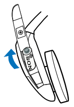
Setting Up the Headphones

Install the supplied size AA (R6) battery into the headphones.

1 Open the battery compartment lid by pressing and sliding the lid as illustrated.



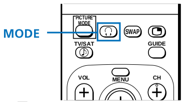
2 Lift the cover and insert the battery into the compartment with the positive side up and then close the lid.



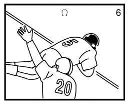
Notes

- When used continuously, the battery will last:
  — up to 40 hours with alkaline batteries.
  — up to 20 hours with manganese batteries.
- Replace the battery with a new one when the sound becomes weak.

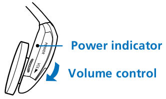
Using the Headphones



1 Press 🎧.
The 🎧 icon and channel number are displayed.



2 Turn the power on by placing the headphones securely on your head.

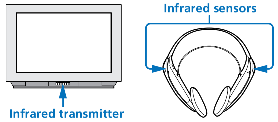


If you only want to listen to the sound from the cordless headphones, turn down the TV speaker volume, or press **MUTING**.

3 To turn off the headphones, remove them from your head and press 🎧.

Tip

For optimal sound reception, do not cover the infrared transmitter on the TV or the infrared sensors on the headphones.

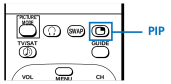


Notes

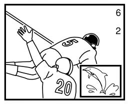
- To help prevent possible hearing damage due to sudden or prolonged excessive volume, do not set the headphone volume too high while using them.
- To prevent possible damage to the infrared transmitter in the television, please press the 🎧 to turn off the headphone feature when the headphones are not in use.

Listening to Sound from a Main/PIP Picture

If you want to listen to the sound from the main or window picture through your headphones, select the audio source.

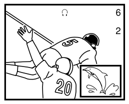

PICTURE MODE
TV/SAT
SWAP
GUIDE
VOL
MENU
CH
PIP

1 Press ⧉ to display a window picture.

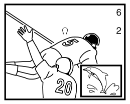


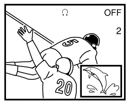
2 Press 🎧.

The 🎧 display and channel number appears for about three seconds.


🎧
6
2
20
Main Picture audio

Press 🎧 again to switch the audio to the window picture.


🎧
6
2
20
Window Picture audio

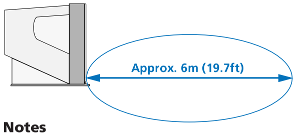

🎧
OFF
2
20
Headphones off

Notes

- Exiting from PIP will return the sound to the main picture.
- The audio to the headphones will be automatically turned off when the TV is powered off.

Coverage Area of the Infrared Rays

This diagram illustrates the approximate area covered by the infrared rays emitted from the transmitter.


Approx. 6m (19.7ft)

Notes

- If you use the headphones too far from the TV, you may hear a hissing noise.
- If something is between the headphones and the TV, the sound may be interrupted. These problems are inherent to IR communication and do not reflect a problem with the TV.

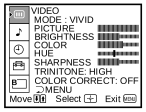
Using Your Menus

Learning menu selection

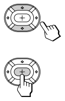
Use the **MENU** button to access a menu and use the arrow buttons (⬆ or ⬇) to alter settings. Use the following example, in which we activate the CABLE, to learn how to modify settings.

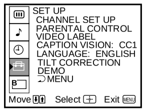
1 Press the **MENU** button.

The main menu appears.

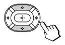

VIDEO
MODE : VIVID
PICTURE
BRIGHTNESS
COLOR
HUE
SHARPNESS
TRINITONE: HIGH
COLOR CORRECT: OFF
MENU
Move
Select
Exit

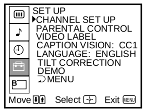
2 Press ⬆ or ⬇ to highlight the desired menu (in this case SET UP 🧰), and press ⊕ to select it.




SET UP
CHANNEL SET UP
PARENTAL CONTROL
VIDEO LABEL
CAPTION VISION: CC1
LANGUAGE: ENGLISH
TILT CORRECTION
DEMO
MENU
Move
Select
Exit

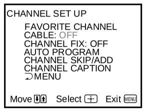
3 Press ⬆ or ⬇ to move to the desired option and press ⊕.



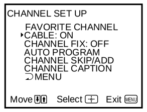

SET UP
CHANNEL SET UP
PARENTAL CONTROL
VIDEO LABEL
CAPTION VISION: CC1
LANGUAGE: ENGLISH
TILT CORRECTION
DEMO
MENU
Move
Select
Exit

4 Press ⬆ or ⬇ to move to the desired feature and press ⊕.

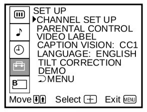
Options for your selection will be highlighted.


CHANNEL SET UP
FAVORITE CHANNEL
CABLE: OFF
CHANNEL FIX: OFF
AUTO PROGRAM
CHANNEL SKIP/ADD
CHANNEL CAPTION
MENU
Move
Select
Exit

5 Press ⬆ or ⬇ to make your selection and press ⊕.


CHANNEL SET UP
FAVORITE CHANNEL
CABLE: ON
CHANNEL FIX: OFF
AUTO PROGRAM
CHANNEL SKIP/ADD
CHANNEL CAPTION
MENU
Move
Select
Exit

When you are finished making changes to the selected menu, choose ⤾ MENU to return to the main menu.


SET UP
CHANNEL SET UP
PARENTAL CONTROL
VIDEO LABEL
CAPTION VISION: CC1
LANGUAGE: ENGLISH
TILT CORRECTION
DEMO
MENU
Move
Select
Exit

Tip 💡

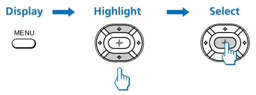
*Pressing **MENU** on the remote control will allow you to exit from the menus at any time.*

Using Your Menus (continued)

Quick start to the menus

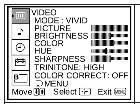
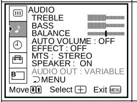
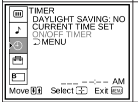
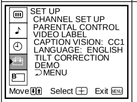
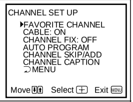
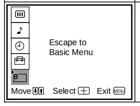
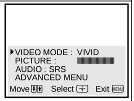
The following is a guide to your menus.

To select a menu:

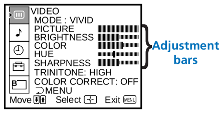

Display
MENU
Highlight
Select

Note

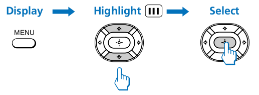
Menus shown are for KV-36FV15, your menus may not look exactly like those illustrated.

 VIDEO MODE : VIVID PICTURE BRIGHTNESS COLOR HUE SHARPNESS TRINITONE: HIGH COLOR CORRECT: OFF MENU Move Select Exit	The VIDEO menu will allow you to make adjustments to your picture settings. It will also allow you to customize the picture MODE based on the type of program you are viewing.	
 AUDIO TREBLE BASS BALANCE AUTO VOLUME : OFF EFFECT : OFF MTS : STEREO SPEAKER : ON AUDIO OUT : VARIABLE MENU Move Select Exit	The AUDIO menu offers enhanced audio options such as listening to second audio programming (SAP), or customizing the EFFECT of the sound on your TV.	
 TIMER DAYLIGHT SAVING: NO CURRENT TIME SET ON/OFF TIMER MENU --- --:-- AM Move Select Exit	The TIMER menu sets the clock on your TV and allows you to program your TV for scheduled viewing using the ON/OFF TIMER.	
 SET UP CHANNEL SET UP PARENTAL CONTROL VIDEO LABEL CAPTION VISION: CC1 LANGUAGE: ENGLISH TILT CORRECTION DEMO MENU Move Select Exit	The SET UP menu provides several options for setting up your channels, labeling your TV/VIDEO inputs, and selecting the LANGUAGE of your menus. The CHANNEL SET UP menu is a sub-menu which provides further options for setting up your TV.	 CHANNEL SET UP FAVORITE CHANNEL CABLE: ON CHANNEL FIX: OFF AUTO PROGRAM CHANNEL SKIP/ADD CHANNEL CAPTION MENU Move Select Exit
 Escape to Basic Menu Move Select Exit	The Basic Menu provides quick access to frequently used settings.	 VIDEO MODE : VIVID PICTURE : AUDIO : SRS ADVANCED MENU Move Select Exit

Using the VIDEO Ⅲ menu


VIDEO
MODE : VIVID
PICTURE
BRIGHTNESS
COLOR
HUE
SHARPNESS
TRINITONE: HIGH
COLOR CORRECT: OFF
MENU
Move
Select
Exit
Adjustment bars

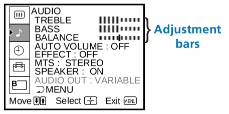
To select the VIDEO Ⅲ menu:


Display
MENU
Highlight Ⅲ
Select

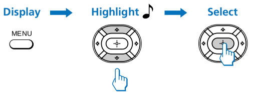
MODE *Customized picture viewing*	**VIVID:** Select for enhanced picture contrast and sharpness. **SPORTS:** Select for a bright picture. **MOVIE:** Select for a finely detailed picture. **STANDARD:** Select to receive a standard picture. *Press the **PICTURE MODE** button to access one of the above settings directly.*
PICTURE *Picture contrast*	Adjust left to decrease picture contrast and soften the color. Adjust right to increase picture contrast and create more vivid color.
BRIGHTNESS *Picture adjustment*	Adjust left to darken the picture. Adjust right to brighten the picture.
COLOR *Color saturation*	Adjust left to decrease color intensity or saturation. Adjust right to increase color intensity or saturation.
HUE *Color tones*	Adjust left to increase the red tones. Adjust right to decrease the red tones.
SHARPNESS *Picture detail*	Adjust left to soften the picture detail. Adjust right to sharpen the picture detail.
TRINITONE *White intensity adjustment*	**HIGH:** Gives the white colors a blue tint. **MEDIUM:** Gives the white colors a neutral tint. **NTSC STD:** Gives the white colors a red tint.
COLOR CORRECT *Color ratio adjustment*	**ON:** Emphasizes reds and blues. **OFF:** Emphasizes greens.

Using Your Menus (continued)

Using the AUDIO ♪ menu


AUDIO
TREBLE
BASS
BALANCE
AUTO VOLUME : OFF
EFFECT : OFF
MTS : STEREO
SPEAKER : ON
AUDIO OUT : VARIABLE
MENU
Move ⬇⬆ Select ⊕ Exit MENU

To select the AUDIO ♪ menu:

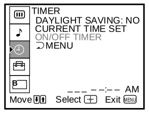


Tips

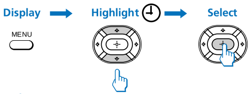
- *Press ♪ to cycle through your AUDIO options.*
- *Press **MTS/SAP** on your remote control to cycle through the MTS options.*

TREBLE	Adjust left or right to decrease or increase higher pitched sound.
BASS	Adjust left or right to decrease or increase low pitched sounds.
BALANCE	Adjust left or right to emphasize left and right speaker balance.
AUTO VOLUME *Stabilizes volume*	(KV-27FV15, 32FV15, 36FV15 only) **ON**: Select to stabilize the volume. **OFF**: Select to turn AUTO VOLUME off.
EFFECT *Enhanced audio*	**SIMULATED**: Adds a surround-like effect to mono programs. **SRS**: Produces a dynamic three dimensional sound for stereo signals. **OFF**: Normal stereo or mono reception.
MTS *Multi-Channel sound*	**MONO**: Select to reduce noise in areas with poor reception. **SAP**: Select to listen to bilingual broadcast or other Second Audio Programs (SAP). **STEREO**: Select when viewing a broadcast in stereo.
SPEAKER *Custom selection of audio output source*	**ON:** Select to listen to the sound from the TV speakers with or without a separate stereo system. **OFF:** Select to turn off the TV speakers and listen to the TV's sound only through external audio system speakers.
AUDIO OUT *Use to control the TV's volume through a stereo*	AUDIO OUT can only be set when SPEAKER is set to OFF. **VARIABLE:** Adjust the volume through your TV. **FIXED:** Adjust the TV volume through a connected stereo.

Using the TIMER ◷ menu

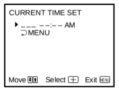
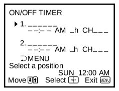

TIMER
DAYLIGHT SAVING: NO
CURRENT TIME SET
ON/OFF TIMER
MENU
_ _ _ – –:– – AM
Move ⬇⬆ Select ⊕ Exit MENU

To select the TIMER ◷ menu:



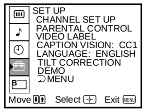
Tip

Set DAYLIGHT SAVING before setting the clock.

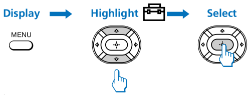
DAYLIGHT SAVING	**YES:** Select to compensate for Daylight Saving Time. **NO:** Select at the end of Daylight Saving Time.
CURRENT TIME SET *Necessary for the ON/OFF TIMER*	With the CURRENT TIME SET menu open: 1 Press ⊕. 2 Press ⬆ or ⬇ until the current day is displayed. Press ⊕ to select. 3 Press ⬆ or ⬇ until the current hour and AM/PM is displayed. Press ⊕ to select 4 Press ⬆ or ⬇ until the current minute is displayed, and press ⊕. *Any loss of power will cause these settings to be cleared.*  CURRENT TIME SET _ _ _ – –:– – AM MENU Move ⬇⬆ Select ⊕ Exit MENU
ON/OFF TIMER *Wake up or scheduled viewing*	*CURRENT TIME SET must be programmed before you can use the ON/OFF TIMER.* With the ON/OFF TIMER menu open: 1 Choose the ON/OFF TIMER you would like to set and press ⊕. 2 Press ⬆ or ⬇ until the desired day or range of days is displayed. Press ⊕ to select. 3 Indicate the time that you want the TV to turn on (hour, then minutes) by pressing ⬆ or ⬇ and then ⊕. 4 Set the time duration (maximum of 6 hours) by pressing ⬆ or ⬇ and then ⊕. 5 Press ⬆ or ⬇ until you reach the desired channel. Press ⊕ to select. *When you perform AUTO PROGRAM, all ON/OFF TIMER settings will be cleared.*  ON/OFF TIMER 1. _______ – –:– – AM _h CH___ 2. _______ – –:– – AM _h CH___ MENU Select a position SUN 12:00 AM Move ⬇⬆ Select ⊕ Exit MENU

Using Your Menus (continued)

Using the SET UP 🧰 menu

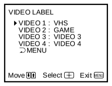

SET UP
CHANNEL SET UP
PARENTAL CONTROL
VIDEO LABEL
CAPTION VISION: CC1
LANGUAGE: ENGLISH
TILT CORRECTION
DEMO
MENU
Move ⬇⬆ Select ⊕ Exit MENU

To select the SET UP 🧰 menu:

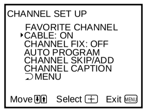


Note

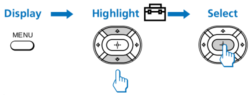
The FAVORITE CHANNEL feature is not available for the AUX input.

CHANNEL SET UP	The CHANNEL SET UP menu is a submenu which provides further options for setting up your TV. (see page 23)
PARENTAL CONTROL	The PARENTAL CONTROL feature provides parents several options for programming the TV to block shows based on their rating. (see pages 25-28).
VIDEO LABEL *Label connected equipment for easy recognition*	**With the VIDEO LABEL window open:** 1 Press ⬆ or ⬇ to access the input you want to label and press ⊕. 2 Press ⬆ or ⬇ to choose the label and press ⊕.  VIDEO LABEL VIDEO 1 : VHS VIDEO 2 : GAME VIDEO 3 : VIDEO 3 VIDEO 4 : VIDEO 4 MENU Move ⬇⬆ Select ⊕ Exit MENU **VIDEO LABEL Options:** VIDEO 1/2/3: VHS, 8mm, BETA, LD, GAME, SAT, DVD, WEB, RECEIVER, DTV, SKIP VIDEO 4: DVD, DTV, SKIP If you select SKIP, your TV will skip this connection when you press the **TV/VIDEO** button.
CAPTION VISION *Closed Captioning and channel information*	**CC1, 2, 3 or 4:** Displays a printed version of the dialog or sound effects of a program, (the mode should be set to CC1 for most programs). **TEXT1, 2, 3 or 4:** Displays network/station information presented using either half or the whole screen. **XDS (Extended Data Service):** Displays network name, program name, program length, and time of the show if the broadcaster offers this service.
LANGUAGE	Select from available languages to display all menus in your language of choice.
TILT CORRECTION	Press ⬆ or ⬇ to correct any tilt of the picture between +5 and –5 and press ⊕.
DEMO	Select to run a demonstration of on-screen menus.

Using the CHANNEL SET UP menu

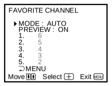
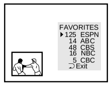

CHANNEL SET UP
FAVORITE CHANNEL
CABLE: ON
CHANNEL FIX: OFF
AUTO PROGRAM
CHANNEL SKIP/ADD
CHANNEL CAPTION
MENU
Move ⬇⬆ Select ⊕ Exit MENU

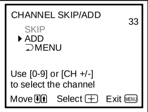
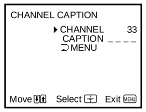
To select the CHANNEL SET UP menu:



Note

Your remote control can be programmed to operate your cable box. (see page 31)

FAVORITE CHANNEL *Quick access to favorite channels*	**Setting FAVORITE CHANNEL:** 1 Press ⊕ and then ⬆ or ⬇ to select AUTO or MANUAL. (Selecting AUTO will display the last five channels chosen with the remote control's 0-9 buttons.) 2 Press ⬆ or ⬇ to move the cursor to 1, 2, 3, 4 or 5 and press ⊕. 3 Press ⬆ or ⬇ to access the desired channel and press ⊕. To preview your favorite channels in the window picture, set PREVIEW to ON.  FAVORITE CHANNEL MODE : AUTO PREVIEW : ON 1. 6 2. 5 3. 4 4. 3 5. 2 MENU Move ⬇⬆ Select ⊕ Exit MENU **Using FAVORITE CHANNEL:** 1 Exit all menus and press ⊕, your FAVORITE CHANNEL options will appear. 2 Press ⬆ or ⬇ to access the channel you want to watch, and press ⊕. For KV-27FV15, 32FV15, 36FV15 only If PREVIEW is set to ON, a window picture displays your favorite channels as you cycle through the options.  FAVORITES 125 ESPN 14 ABC 48 CBS 16 NBC 5 CBC Exit
CABLE	**ON:** Select if you are receiving cable channels with a CATV cable. **OFF:** Select if you are using an antenna. You will need to run AUTO PROGRAM after changing your CABLE settings.
CHANNEL FIX *Useful when you have a cable box or satellite receiver connected*	**2-6:** Select when you want to control all channel selection through a cable box. Select the appropriate channel number (usually 3 or 4) and use the cable box's remote control for selection. **AUX 2-6:** Select when a cable box is connected to the AUX input, (see page 4). Press the **AUX** button to alternate between. **VIDEO:** Select from available video inputs when you have video equipment connected (e.g. satellite receiver) and you want your TV fixed to it.
AUTO PROGRAM	Instructs the TV to program all receivable channels.

CHANNEL SKIP/ADD	With the CHANNEL SKIP/ADD window open: **1** Select the desired channel. **2** Press ⊕ to SKIP or ADD (only one option will be available).	 CHANNEL SKIP/ADD 33 SKIP ▸ADD ↩MENU Use [0-9] or [CH +/-] to select the channel Move ↓↑ Select ⊕ Exit MENU
CHANNEL CAPTION *Label up to 12 channels with their call letters*	With the CHANNEL CAPTION menu open: **1** Press ⊕ and then ↑ or ↓ to access the desired channel, and press ⊕ again. **2** Press ↑ or ↓ to display the first letter or number of the caption and press ⊕ to select it. **3** Press ⊕ to activate.	 CHANNEL CAPTION ▸CHANNEL 33 CAPTION _ _ _ _ ↩MENU Move ↓↑ Select ⊕ Exit MENU

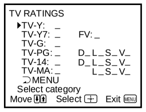
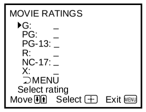
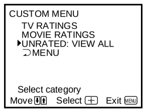
The Parental Guideline Rating System

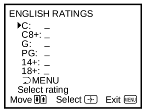
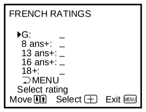
This table provides a brief overview of the ratings systems available for the PARENTAL CONTROL feature.

For detailed information on how to change your TV rating, see pages 27-28.

Notes

- The content ratings will increase depending on the level of the age-based rating. For example, a program with a TV-PG V (Violence) rating may contain moderate violence, while a TV-14 V (Violence) rating may contain more intense violence.
- If you choose to block unrated TV programs, please be aware that the following programs may be blocked: emergency broadcasts, political programs, sports, news, public service announcements, religious programs and weather.

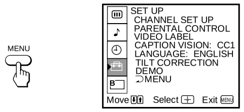
Overview of the Ratings		
TV RATINGS *Block programs by their rating, content or both*	**Age based options:** **TV-Y:** All children. **TV-Y7:** Directed to older children. **TV-G:** General Audience. **TV-PG:** Parental Guidance suggested. **TV-14:** Parents Strongly cautioned. **TV-MA:** Mature Audience only. **Content based options:** **FV:** Fantasy Violence. **D:** Suggestive Dialogue. **L:** Strong Language. **S:** Sexual situations. **V:** Violence.	 TV RATINGS ▸TV-Y: _ TV-Y7: _ FV: _ TV-G: _ TV-PG: _ D_ L_ S_ V_ TV-14: _ D_ L_ S_ V_ TV-MA: _ L_ S_ V_ ↩MENU Select category Move ↓↑ Select ⊕ Exit MENU
MOVIE RATINGS	(U.S. models only) **G:** All children. **TV-PG:** Directed to older children. **PG-13:** General Audience. **R:** Parental Guidance suggested **NC-17:** No one under 17 admitted. **X:** No one under 17 admitted.	 MOVIE RATINGS ▸G: _ PG: _ PG-13: _ R: _ NC-17: _ X: _ ↩MENU Select rating Move ↓↑ Select ⊕ Exit MENU
UNRATED *Block programs or movies that are broadcast without a rating*	(U.S. models only) **VIEW ALL:** Allows all unrated programming. **BLOCK TV:** Blocks all unrated TV programs. **BLOCK MOVIE:** Blocks all unrated movies. **BLOCK ALL:** Blocks all unrated programming.	 CUSTOM MENU TV RATINGS MOVIE RATINGS ▸UNRATED: VIEW ALL ↩MENU Select category Move ↓↑ Select ⊕ Exit MENU

Overview of the Ratings		
ENGLISH RATINGS *For Canadian programs that are broadcast in English*	(Canadian models only) **C:** All children. **C8+:** Children 8 years and older. **G:** General programming. **PG:** Parental Guidance. **14+:** Viewers 14 and older. **18+:** Adult programming.	 ENGLISH RATINGS ▸C: _ C8+: _ G: _ PG: _ 14+: _ 18+: _ ↩MENU Select rating Move ↓↑ Select ⊕ Exit MENU
FRENCH RATINGS *For Canadian programs that are broadcast in French*	(Canadian models only) **G:** General programming. **8 ans+:** Not recommended for young children. **13 ans+:** Not recommended for ages under 13. **16 ans+:** Not recommended for ages under 16 **18 ans+:** Programming restricted to adults.	 FRENCH RATINGS ▸G: _ 8 ans+: _ 13 ans+: _ 16 ans+: _ 18+: _ ↩MENU Select rating Move ↓↑ Select ⊕ Exit MENU
U.S.A. RATINGS *For programs from the United States*	(Canadian models only) Please see TV RATINGS on page 25 for information on U.S.A. RATINGS.	

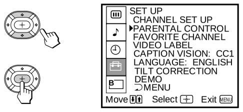
Using the PARENTAL CONTROL menu

This section shows you how to access the PARENTAL CONTROL menu. After you follow the example below, the next section shows you how to adjust your TV's rating.

1 Press **MENU** and select the SET UP menu.

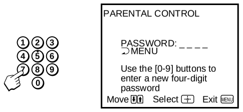

MENU
SET UP
CHANNEL SET UP
PARENTAL CONTROL
VIDEO LABEL
CAPTION VISION: CC1
LANGUAGE: ENGLISH
TILT CORRECTION
DEMO
↩MENU
Move ↓↑ Select ⊕ Exit MENU

2 Point the cursor to PARENTAL CONTROL and press ⊕.

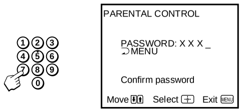

SET UP
CHANNEL SET UP
▸PARENTAL CONTROL
FAVORITE CHANNEL
VIDEO LABEL
CAPTION VISION: CC1
LANGUAGE: ENGLISH
TILT CORRECTION
DEMO
↩MENU
Move ↓↑ Select ⊕ Exit MENU

You will be asked to enter a 4-digit password for any future access into the PARENTAL CONTROL menu.

3 Press ⊕ and use the **0-9** buttons to enter your 4-digit password.


PARENTAL CONTROL
PASSWORD: _ _ _ _
↩MENU
Use the [0-9] buttons to enter a new four-digit password
Move ↓↑ Select ⊕ Exit MENU

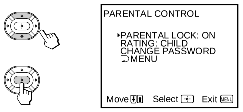
4 Confirm your password by entering it again.


PARENTAL CONTROL
PASSWORD: X X X _
↩MENU
Confirm password
Move ↓↑ Select ⊕ Exit MENU

Once your password is set correctly, you will be taken into the PARENTAL CONTROL menu.

In order to change the RATING you will need to set PARENTAL LOCK to ON.

5 Point the cursor at PARENTAL LOCK and press ⊕. Press ↑ or ↓ to ON and press ⊕.


PARENTAL CONTROL
▸PARENTAL LOCK: ON
RATING: CHILD
CHANGE PASSWORD
↩MENU
Move ↓↑ Select ⊕ Exit MENU

See pages 25-26 for an overview of the Parental Guideline ratings.

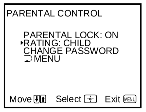
Tip

Keep this instruction manual in a safe place. In the event that you forget your password, please see page 33.

Using Your Menus (continued)

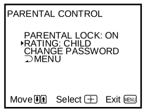
Setting the TV’s RATING

This section provides information on how to set the TV’s RATING and how to change your password.


PARENTAL CONTROL
PARENTAL LOCK: ON
▸RATING: CHILD
CHANGE PASSWORD
⮌MENU

Note

Entering your password to view a blocked program will temporarily turn PARENTAL LOCK to OFF. To reactivate your PARENTAL CONTROL settings, turn the TV off then back on; the TV will restore your rating settings.

PARENTAL LOCK *Turns ratings on/off*	**ON:** Select to activate the RATING. **OFF:** Turns off current ratings.
RATING	If you are not familiar with the Parental Guideline rating system, you should use one of the following preselected categories to help simplify the rating selection. **The following maximum ratings will be allowed:** **CHILD:** TV-Y, TV-G, G (U.S. models only), TV-Y, G (Canadian models only). **YOUTH:** TV-PG, PG (U.S. models only), TV-PG, PG, 8 ans+ (Canadian models only). **YOUNG ADULT:** TV-14, PG-13 (U.S. models only), TV-14, 14+, 13 ans+ (Canadian models only).  PARENTAL CONTROL PARENTAL LOCK: ON ▸RATING: CHILD CHANGE PASSWORD ⮌MENU **CUSTOM:** If you prefer to set more restrictive ratings, highlight CUSTOM and press ⊕. See pages 25-26, for an overview of the rating systems available. **In the CUSTOM RATINGS menu:** 1 Select the desired rating category and press ⊕. 2 Press ⬆ or ⬇ to select the maximum rating or content and press ⊕. 3 Press ⬆ or ⬇ to block or unblock the rating or content and press ⊕. *Once you have blocked a rating or content, all higher ratings or contents will be automatically blocked.* **To view a blocked program:** Press **ENTER** on the remote control, then use the **0-9** buttons to enter your password.
CHANGE PASSWORD	**To reset your password:** 1 Move the cursor to CHANGE PASSWORD press ⊕. 2 Use the **0-9** buttons to create a new password, enter again to confirm. *In the event that you forget your password, see page 33.*

Operating Video Equipment

Programming the remote

You can use the supplied remote control to operate Sony or non-Sony video equipment.

1 Press **CODE SET**.
2 Press **VTR/DVD** (FUNCTION).
3 Use the **0-9** buttons to key in the manufacturer's code number from the following chart.
4 Press **ENTER**.

VCR code numbers

Manufacturer	Code
Sony	301, 302, 303
Admiral (M. Ward)	327
Aiwa	338, 344
Audio Dynamic	314, 337
Broksonic	319, 317
Canon	309, 308
Citizen	332
Craig	302, 332
Criterion	315
Curtis Mathes	304, 338, 309
Daewoo	341, 312, 309
DBX	314, 336, 337
Dimensia	304
Emerson	319, 320, 316, 317, 318, 341
Fisher	330, 335
Funai	338
General Electric	329, 304, 309
Go Video	322, 339, 340
Goldstar	332
Hitachi	306, 304, 305,338
Instant Replay	309, 308
JC Penney	309, 305, 304, 330, 314, 336, 337
JVC	314, 336, 337, 345, 346, 347
Kenwood	314, 336, 332, 337
LXI (Sears)	332, 305, 330, 335, 338
Magnavox	308, 309, 310
Marantz	314, 336, 337
Marta	332
Memorex	309, 335
Minolta	305, 304
Mitsubishi/MGA	323, 324, 325, 326
Multitech	325, 338, 321
NEC	314, 336, 337
Olympic	309, 308
Optimus	327
Panasonic	308, 309, 306, 307
Pentax	305, 304
Philco	308, 309
Philips	308, 309, 310
Pioneer	308
Quasar	308, 309, 306
RCA/PROSCAN	304, 305, 308, 309, 311, 312, 313, 310, 329
Realistic	309, 330, 328, 335, 324, 338
Sansui	314
Samsung	322, 313, 321
Sanyo	330, 335
Scott	312, 313, 321, 335, 323, 324, 325, 326
Sharp	327, 328
Shintom	315
Signature 2000 (M. Ward)	338, 327
SV2000	338
Sylvania	308, 309, 338, 310
Symphonic	338
Tashiro	332
Tatung	314, 336, 337
Teac	314. 336, 338, 337
Technics	309, 308
Toshiba	312, 311
Wards	327, 328, 335, 331, 332
Yamaha	314, 330, 336, 337
Zenith	331

Operating a VCR	Buttons on the remote control
To turn on or off	Press **VTR/DVD** (POWER).
To select a channel directly	Press the **0-9** buttons.
To change channels	Press **CH +/–**.
To record	Press ▶ and ● simultaneously.
To play	Press ▶.
To stop	Press ■.
To fast forward	Press ▶▶.
To rewind the tape	Press ◀◀.
To pause	Press ❚❚. To resume normal playback, press again or press ▶.
To scan	Press ▶▶ or ◀◀ during playback. To resume normal playback, release the button.
To change input mode	Press **TV/VTR**.

Operating Video Equipment (continued)

Tips

- *In some rare cases, you may not be able to operate your non-Sony video equipment with the supplied remote control. In this case, please use the equipment’s own remote control.*
- *When you remove the batteries, the code number may revert to the factory setting.*
- *The code numbers for Sony VCRs are assigned at the factory as follows:*

VHS VCR	301 (preset code for the supplied remote control)
8 mm VCR	302
Beta, ED Beta VCRs	303

Laserdisc code numbers

Manufacturer	Code
Sony	701
Panasonic	704, 710
Pioneer	702

Operating a Laserdisc	Buttons on the remote control
To turn on or off	Press **VTR/DVD** (POWER).
To play	Press ▶.
To stop	Press ■.
To pause	Press ❚❚. To resume normal playback, press again or press ▶.
To scan	Press ▶▶ or ◀◀ during playback. To resume normal playback, press ▶.
To search the chapter forward or backward	Press **CH +/–**.

Tip

If you will not be programming a satellite receiver or cable box into the SAT/CABLE function of your remote, you can use it to program other video equipment (e.g. DVD, MDP, or second VCR).

DVD (Digital Versatile Disc) code numbers

Manufacturer	Code
Sony	751
Panasonic	753
Pioneer	752
RCA	755
Toshiba	754

Operating a DVD player	Buttons on the remote control
To turn on or off	Press **VTR/DVD** (POWER).
To play	Press ▶.
To stop	Press ■.
To pause	Press ❚❚. To resume normal playback, press again or press ▶.
To scan	Press ▶▶ or ◀◀ during playback. To resume normal playback, press ▶.
To search the chapter forward or backward	Press **CH +/–**.
To select chapters directly	**0-9** + **ENTER**.
MENU	Press to display DVD menu.
To move cursor in menu	Use your arrow buttons ⬆, ⬇, ⬅, ➡.

Operating a Cable Box or Satellite Receiver

Programming the remote control

You can program the supplied remote control to operate a cable box or satellite receiver.

1 Press **CODE SET**.
2 Press **SAT/CABLE** (FUNCTION).
3 Use the **0-9** buttons to key in the manufacturer's code number from the following chart.
4 Press **ENTER**.

For more details on operating the cable box or satellite receiver

Refer to the operating instructions that were supplied with the equipment.

If the remote control doesn’t work

First, try repeating the setup procedures using the other codes listed for your equipment.

Tips

- *If more than one code number is listed, try entering them one by one until you come to the correct code for your equipment.*
- *If you enter a new code number, the code number you previously entered at that setting is erased.*
- *In some rare cases, you may not be able to operate your equipment with the supplied remote control. In this case, use the equipment’s supplied remote control.*
- *Whenever you remove the batteries the code numbers may revert to the factory setting.*

Cable box code numbers

Manufacturer	Code
Hamlin/Regal	222, 223, 224, 225, 226
Jerrold/G. I.	201, 202, 203, 204, 205, 206, 207, 208, 218
Oak	227, 228, 229
Panasonic	219, 220, 221
Pioneer	214, 215
Scientific Atlanta	209, 210, 211
Tocom	216, 217
Zenith	212, 213

Satellite receiver code numbers

Manufacturer	Code
Sony	801 (preset code for remote control)
General Electric	802
Hitachi	805
Hughes	804
Panasonic	803
RCA/PROSCAN	802, 808
Toshiba	806, 807

Troubleshooting

Consult the table below; it suggests solutions to specific problems.

Problem	What it could be	What you can do
You want to restore the TV's factory settings		• First, turn the TV on. Then while pressing the **RESET** button on the remote control, press the **POWER** button on the TV. The TV will turn itself off and then back on. When the TV turns on again, all settings will be reset, and the initial setup screen will appear.
A red light keeps flashing on the TV for more than a few seconds	• Your TV may need service.	• Call your local Sony service center.
TV makes a noise when turned on	• This is a normal function of your TV.	
Screen is not lit and there is no sound	• Power cord may not be plugged in. • Remote control batteries may not be inserted correctly. • TV/VIDEO setting may be incorrect. • Current program may exceed PARENTAL CONTROL settings.	• Check your power cord. • Re-insert the batteries in your remote control. • Press **TV/VIDEO** until you receive a channel. • Check your PARENTAL CONTROL settings, (page 28).
Poor or no picture (screen lit), good sound	• VIDEO menu settings may not be adjusted correctly. • Antenna/cable connections may be faulty. • VIDEO LABEL inputs may be set to WEB. (This label darkens the screen for ideal WebTV viewing)	• Readjust your VIDEO menu settings, (page 19). • Check your VIDEO LABEL settings, (page 22).
Good picture, no sound	• Sound may be set to MUTING. • Your TV may be set to SAP. • SPEAKER may not be set correctly.	• Press **MUTING**. • Check the MTS setting in the AUDIO menu, (page 20). • Check your SPEAKER settings, (page 20).
No color	• Color settings may not be adjusted correctly.	• Adjust the COLOR settings in the VIDEO menu, (page 19).
Only snow and noise appear on the screen	• CABLE may not be set correctly in the CHANNEL SET UP menu. • Antenna/cable connections may not be correct. • TV may be set to AUX mode.	• Ensure that you have selected the correct CABLE mode in the CHANNEL SET UP menu, (page 23). • Press **ANT** on your remote control to change the input mode, (page 15).

Problem	What it could be	What you can do
Cannot receive upper channels (UHF) when using an antenna	• CABLE setting may not be correct in the CHANNEL SET UP menu.	• Ensure that CABLE is set to OFF in the CHANNEL SET UP menu, (page 23). • Use AUTO PROGRAM to add receivable channels that are not presently in TV memory, (page 23).
Cannot receive any channels when using cable	• CABLE setting may not be correct in the CHANNEL SET UP menu.	• Ensure that CABLE is set to OFF in the CHANNEL SET UP menu, (page 23). • Use AUTO PROGRAM to add receivable channels that are not presently in TV memory, (page 23).
Cannot gain enough volume when using a cable box	• Volume may not be adjusted on your cable box.	• Use the remote control supplied with the cable box.
TV is fixed to one channel	• CHANNEL FIX settings may not be correct.	• Check your CHANNEL FIX settings, (page 23).
Lost password for PARENTAL CONTROL		• In the password screen, enter the following master password: 4357. The master password cannot be used to unlock currently blocked channels.

If, after reading these operating instructions, you have additional questions related to the use of your Sony television, please call our Direct Response Center at 1-800-222-SONY (7669)(U.S. residents only) or (416) 499-SONY (7669)(Canadian residents only).

Specifications

Supplied accessories

Remote control RM-Y168 (KV-32FS10, 36FS10 only), RM-Y171 (KV-27FV15, 32FV15, 36FV15 only)(1)

Batteries size AA (R6) (2)

Optional accessories

Connecting cables
RK-74A, RK-G69HG, VMC-10HG, VMC-720M, VMC-810S/820S, YC-15V/30V

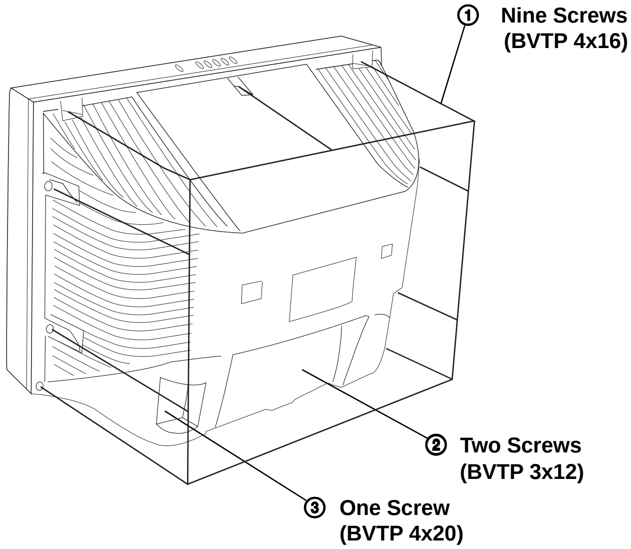
TV Stand SU-27FD2, SU-32FD2, SU-36FD2

U/V mixer EAC-66

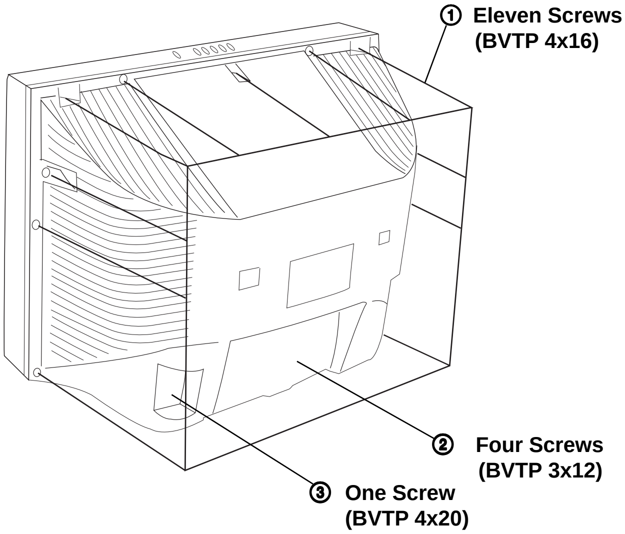
SECTION 2
DISASSEMBLY

2-1. REAR COVER REMOVAL

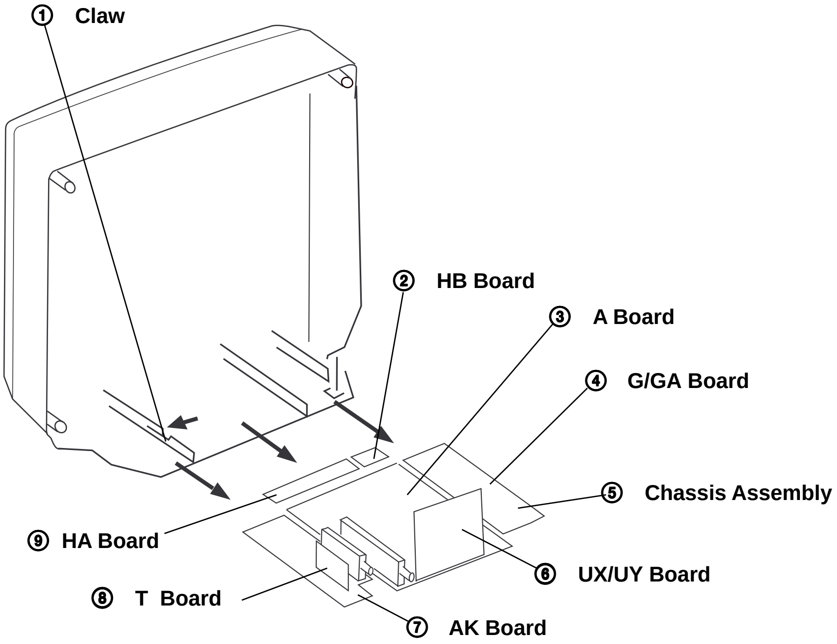
**(KV-32FS10/32FV15/32XBR250/34FV10
34FV15/34FV15C/34FX250C/34FV15K/34FV15T)**


① Nine Screws (BVTP 4x16)
② Two Screws (BVTP 3x12)
③ One Screw (BVTP 4x20)

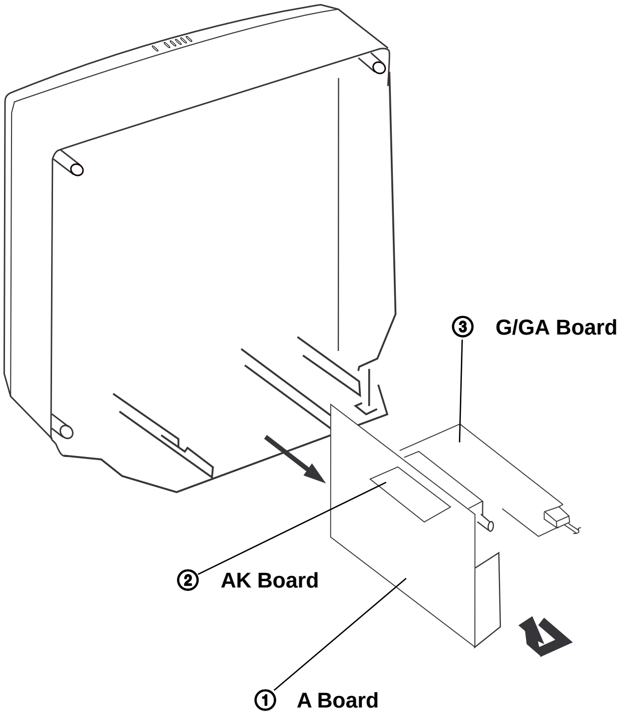
**(KV-36FS10/36FV15/36XBR250
38FX250/38FX250C/38FX250T/38FV15K)**


① Eleven Screws (BVTP 4x16)
② Four Screws (BVTP 3x12)
③ One Screw (BVTP 4x20)

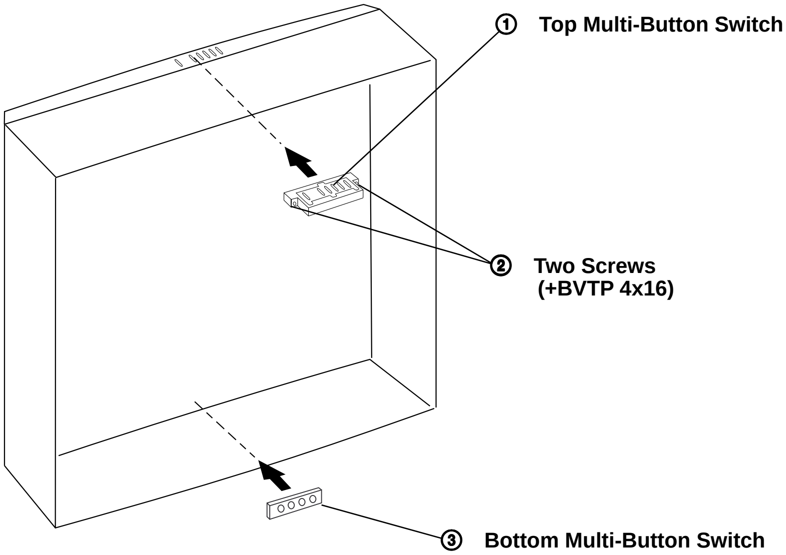
2-2. CHASSIS ASSEMBLY REMOVAL


① Claw
② HB Board
③ A Board
④ G/GA Board
⑤ Chassis Assembly
⑥ UX/UY Board
⑦ AK Board
⑧ T Board
⑨ HA Board

2-3. SERVICE POSITION


③ G/GA Board
② AK Board
① A Board

2-4. MULTI-BUTTON SWITCH REMOVAL

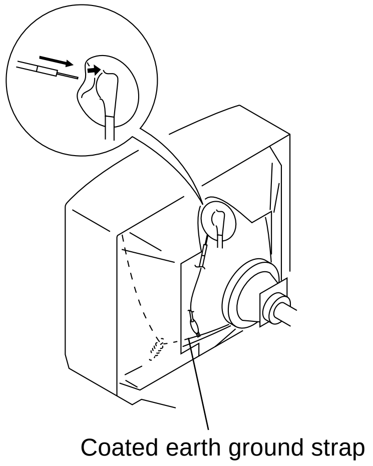

① Top Multi-Button Switch
② Two Screws
(+BVTP 4x16)
③ Bottom Multi-Button Switch

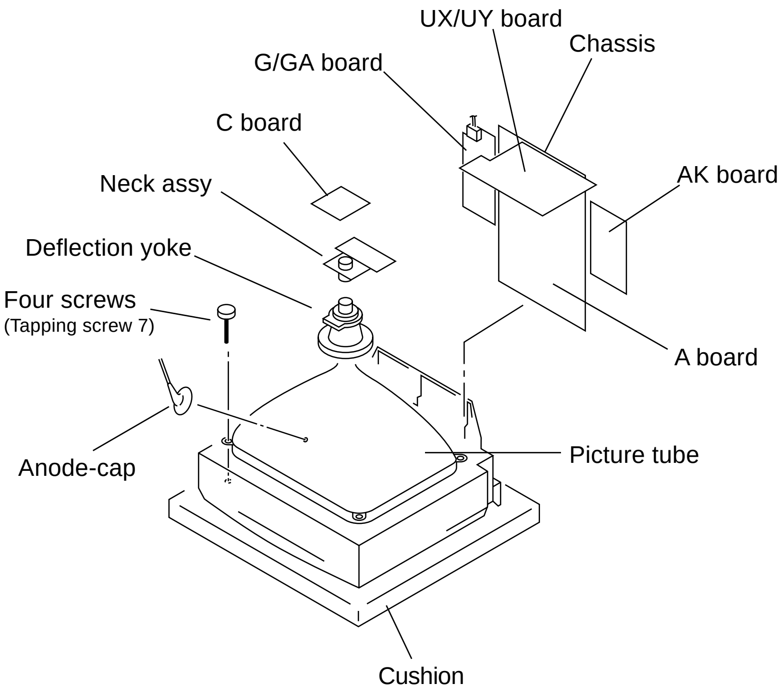
2-5. PICTURE TUBE REMOVAL

WARNING -- Before removing anode-cap:

High voltage remains in the CRT even after the power is disconnected.

To avoid electrical shock, discharge CRT before attempting to remove the anode-cap. Short between anode and coated earth ground strap of CRT.


Coated earth ground strap

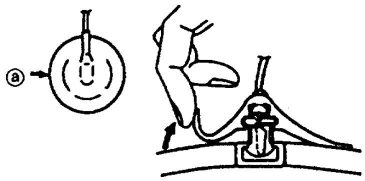

UX/UY board
Chassis
G/GA board
C board
AK board
Neck assy
Deflection yoke
Four screws
(Tapping screw 7)
A board
Anode-cap
Picture tube
Cushion

ANODE-CAP REMOVAL

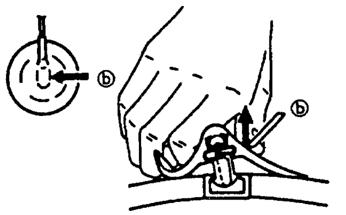
WARNING: High voltage remains in the CRT even after the power is disconnected. To avoid electrical shock, discharge CRT before attempting to remove the anode-cap. Short between anode and coated earth ground strap of CRT.

NOTE: After removing the anode, short circuit the anode of the picture tube and the anode cap to either the metal chassis, CRT shield, or carbon painted on the CRT.

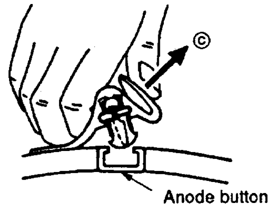
REMOVAL PROCEDURES



① Turn up one side of the rubber cap in the direction indicated by arrow ⓐ.



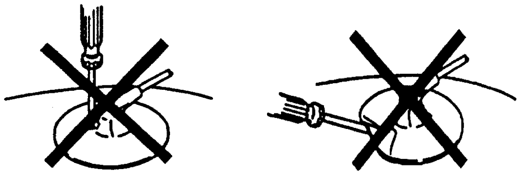
② Use your thumb to pull the rubber cap firmly in the direction indicated by arrow ⓑ.


ⓒ
Anode button

③ When one side of the rubber cap separates from the anode button, the anode-cap can be removed by turning the rubber cap and pulling it in the direction of arrow ⓒ.

HOW TO HANDLE AN ANODE-CAP

① Do not use sharp objects which may cause damage to the surface of the anode-cap.
② Do not squeeze the rubber covering too hard to avoid damaging the anode-cap. A material fitting called a shatter-hook terminal is built into the rubber.
③ Do not force turn the foot of the rubber cover. This may cause the shatter-hook terminal to protrude and damage the rubber.



SECTION 3
SET-UP ADJUSTMENTS

The following adjustments should be made when a complete realignment is required or a new picture tube is installed.

These adjustments should be performed with rated power supply voltage unless otherwise noted.

The controls and switch should be set as follows unless otherwise noted:

PICTURE control .... normal

BRIGHTNESS control .... normal

Perform the adjustments in order as follows:

1. Beam Landing
2. Convergence
3. Focus
4. Screen (G2)/White Balance

Note: Test Equipment Required:

1. Color Bar Pattern Generator
2. Degausser
3. DC Power Supply
4. Digital Multimeter
5. Oscilloscope
6. CRT Analyzer

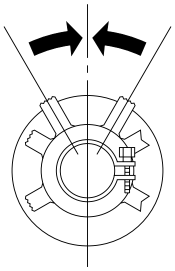
3-1. BEAM LANDING

Preparation:

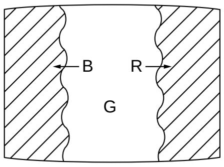
- Input a white pattern signal.
- Face the picture tube in an East or West direction to reduce the influence of geomagnetism.

NOTE: Do not use the hand degausser because it magnetizes the CRT .

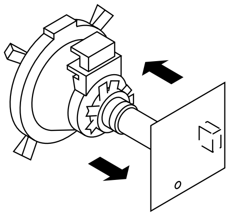
1. Input white pattern from pattern generator.
2. Loosen the deflection yoke mounting screw, and set the purity control to the center as shown below:



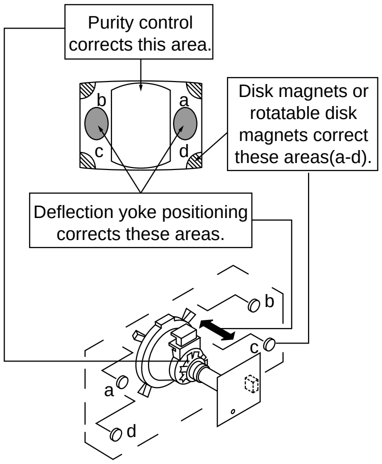
3. Input green pattern from pattern generator.
4. Move the deflection yoke backward, and adjust with the purity control so that green is in the center and red and blue are even on both sides.



5. Move the deflection yoke forward, and adjust so that the entire screen becomes green.



6. Switch over the raster signal to red and blue and confirm the condition.
7. When the position of the deflection yoke is determined, tighten it with the deflection yoke mounting screw.
8. When landing at the corner is not right, adjust by using the disk magnets.


Purity control corrects this area.
Disk magnets or rotatable disk magnets correct these areas(a-d).
Deflection yoke positioning corrects these areas.
a
b
c
d

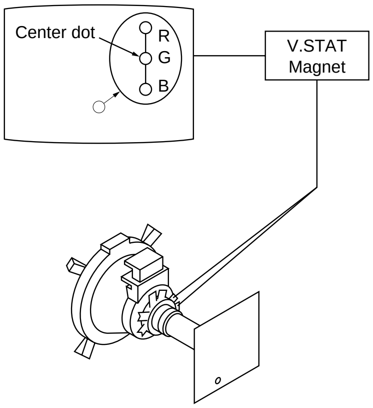
3-2. CONVERGENCE

Preparation:

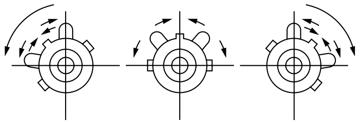
- Before starting, perform FOCUS, V. LIN and V. SIZE adjustments.
- Set BRIGHTNESS control to minimum.
- Input dot pattern.

(1) Vertical and Horizontal Static Convergence

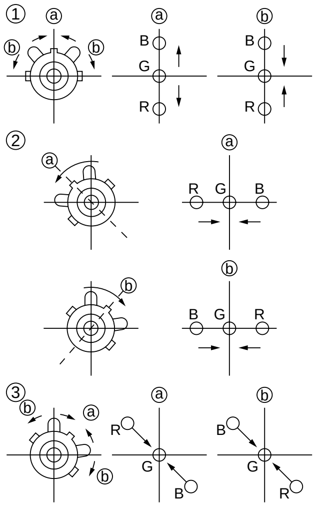
1. Adjust V. STAT magnet to converge red, green and blue dots in the center of the screen. (Vertical movement)



Tilt the V. STAT magnet and adjust static convergence to open or close the V. STAT magnet.



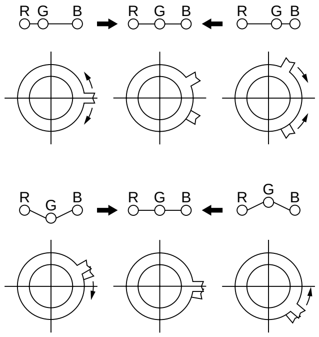
2. When the V. STAT magnet is moved in the direction of arrow ⓐ and ⓑ, red, green, and blue dots move as shown below:



Operation of BMC (Hexapole) Magnet

The respective dot positions resulting from moving each magnet interact, so perform adjustment while tracking.

Use the VSTAT tabs to adjust the red, green, and blue dots so they line up at the center of the screen (move the dots in a horizontal direction.)

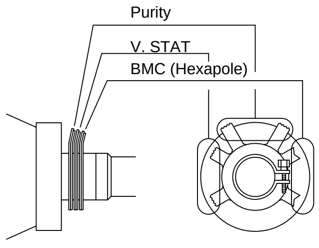


Y Separation Axis Correction Magnet Adjustment

1. Input cross-hatch pattern, adjust PICTURE to minimum and BRIGHTNESS to normal.

2. Adjust the deflection yoke upright so it touches the CRT.

3. Adjust so that the Y separation axis correction magnet on the neck assembly is symmetrical from top to bottom (open state).

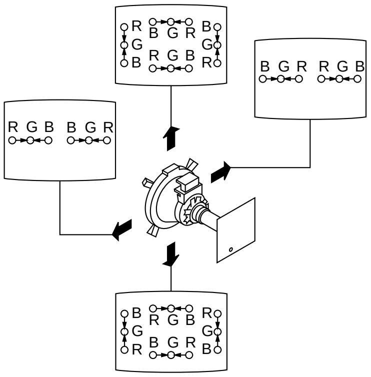


4. Return the deflection yoke to its original position.

(2) Dynamic Convergence Adjustment

- Before starting, perform Horizontal and Vertical Static Convergence Adjustment.

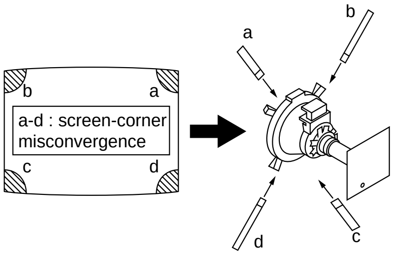
1. Slightly loosen deflection yoke screw.
2. Remove deflection yoke spacers.
3. Move the deflection yoke for best convergence as shown below:


R G B
B G R
B G R
R G B
R
G
B
B G R
R G B
B
G
R
B
G
R
R G B
B G R
R
G
B

4. Tighten the deflection yoke screw.
5. Install the deflection yoke spacers.

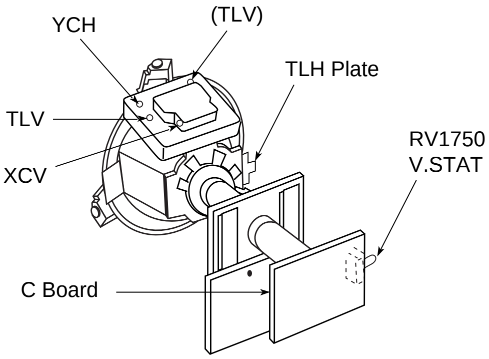
(3) Screen-corner Convergence

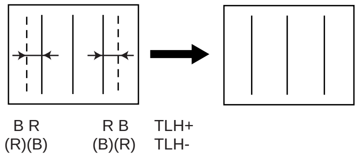
Affix a permalloy assembly corresponding to the misconverged areas:


b
a
a-d : screen-corner misconvergence
c
d
a
b
d
c

(4) TLH Plate Adjustment

- Input crosshatch pattern
- Adjust PICTURE QUALITY to standard, PICTURE and BRIGHTNESS to 50%, and OTHER to standard.
- Adjust the Horizontal Convergence of red and blue dots by tilting the TLH plate on the deflection yoke.


YCH
(TLV)
TLH Plate
TLV
RV1750
V.STAT
XCV
C Board


B R
(R)(B)
R B
(B)(R)
TLH+
TLH-

1. Adjust XCV core to balance X axis.
2. Adjust YCH VR to balance Y axis.
3. Adjust vertical red and blue convergence with V.TILT (TLV VR.)

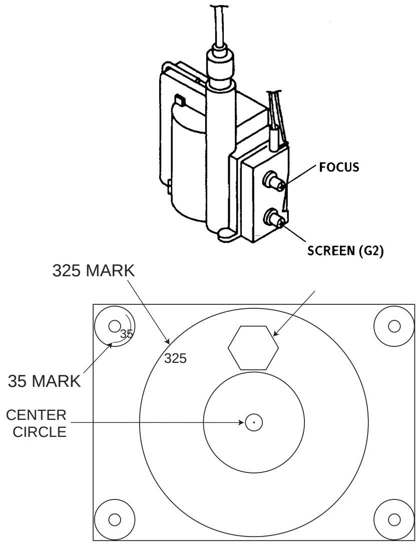
Perform adjustments while tracking items 1 and 2.

(5) H Center SW Adjustment

- Before adjusting H Center SW (S501, S502), make sure that HPOS data is "7".

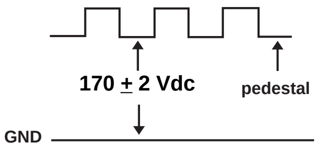
3-3. FOCUS

1. Input Monoscope signal.
2. Set user controls to normal.
3. Set Video mode to STANDARD.
4. Set the PICTURE to maximum.
5. Adjust FOCUS control for best picture at center circle.
6. Then receive an entire white signal. Make sure Magenta Ring is at acceptable level



3-4. SCREEN (G2)

1. Input signal from the pattern generator.
2. Set the user controls to NORMAL.
3. Attach the G2-Jig to the C Board.
4. Adjust RCUT, GCUT, BCUT, and SBRT in service mode with an oscilloscope so that voltages on the red, green, and blue cathodes are 170 ± 2 V DC.
5. Observe the screen and adjust SCREEN (G2) VR to obtain the fairly visible background of dot signal.
6. Push the TEST +JUMP (+ Channel) to cut off the signal, then the screen is bright or dark. Brightness of raster must be increased when adjusting.
7. Adjust screen VR until the screen is just cut off, or scarcely lights up. A signal cannot be seen when the brightness of the raster is high.
8. Push the JUMP again to release the cut off.



3-5. WHITE BALANCE ADJUSTMENTS

NO.	Disp.	Item	All Models
24	RDRV	Red Drive	31
25	GDRV	Green Drive	31
26	BDRV	Blue Drive	31
27	RCUT	Red Cut-off	7
28	GCUT	Green Cut-off	7
29	BCUT	Blue Cut-off	7
38	SBRT	Sub Bright	7

1. Set program palette to "STANDARD" and push "RESET.
2. Input an entire white signal.
3. Set to Service adjustment Mode.
4. Set the PICTURE and BRIGHT to minimum.
5. Adjust with SBRT if necessary.
6. Set RCUT to "14".
7. Select GCUT and BCUT with 1 and 4.
8. Adjust with 3 and 6 for the best white balance.
9. Set the PICTURE and BRIGHT to maximum.
10. Select GDRV and BDRV with 1 and 4.
11. Adjust with 3 and 6 for the best white balance.
12. Write into the memory by pressing MUTING then ENTER **.

NOTE:
White Balance should be adjusted after Sub Contrast because RDRV is also used in Sub Contrast adjustment. (See page 29)

SECTION 4
SAFETY RELATED ADJUSTMENTS

⧓ R530, R531 CONFIRMATION METHOD (HOLD-DOWN CONFIRMATION) AND READJUSTMENTS

Always perform the following adjustments when replacing the following components marked with a ◪ mark on the schematic diagram:

A BOARD: IC355, IC501, D302, D519, D520, D521, C531, C532, Q301, R356, R359, R361, R387, R529, R530, R531, R532, R533, R550, T503

G BOARD (KV-32FS10, 32FV15, 32XBR250, 36FS10, 36FV15, 36XBR250): IC643, R661
GA BOARD (KV-34FV10, 34FV15, 34FV15C, 34FV15K, 34FV15T, 34FX250C, 38FV15K, 38FX250, 38FX250C, 38FX250T): IC6003, R6088

Step 1 Preparation before Confirmation

Turn the POWER switch ON.

Input a white signal and set the PICTURE and BRIGHT controls to maximum.

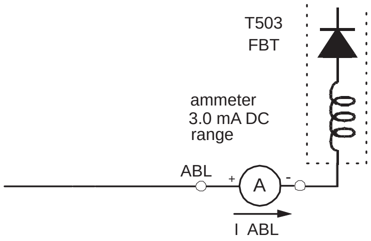
Confirm that, when the set is operating normally, the voltage at check terminal TP85 is more than 23.0 V DC.

At AC input: 120.0 ± 2.0 VAC

Step 2

Input a white signal and verify that I ABL is within the specified range: 2062.5 ± 100 µA,
+B = 135.5 ± 1 VDC .

At AC input: 120.0 ± 2.0 VAC



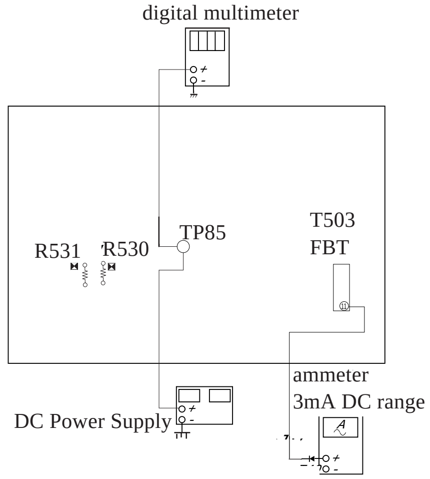
Step 3

Record the voltage between TP85 and ground.

Step 4

Using an external DC power supply, apply voltage between TP85 and ground.

Increase the voltage gradually and confirm that the holdown works (raster disappears) at lower than the voltage recorded in Step 3.



32" Lower than 26.95 ± (-0.1) V DC.
At AC input: 120.0 ± 2.0 VAC

36" Lower than 22.05 ± (-0.1) V DC.
At AC input: 120.0 ± 2.0 VAC

A BOARD - CONDUCTOR SIDE

Step 5

Confirm that a voltage appears between TP85 and ground, of more than 23.0 V DC.

At AC input: 120.0 ± 2.0 VAC

B+ VOLTAGE CONFIRMATION AND ADJUSTMENT

Always perform the following adjustments when replacing the following components marked with ◪ on the schematic diagram:

G BOARD (KV-32FS10, 32FV15, 32XBR250, 36FS10, 36FV15, 36XBR250): IC643, R661
GA BOARD (KV-34FV10, 34FV15, 34FV15C, 34FV15K, 34FV15T, 34FX250C, 38FV15K, 38FX250, 38FX250C, 38FX250T): IC6003, R6088

1) Using Variac, apply AC input voltage: 130.0 ± 2.0 VAC

2) Input a monoscope signal.

3) Set the PICTURE control and the BRIGHT control to initial reset value.

4a) (G Board Models) Confirm the voltage of G Board CN641 between pin ① to ground on "G" PWB is less than 136.5 ± 1.0 V DC.

4b) (GA Board Models) Confirm the voltage of GA Board CN6007, between pin ① to ground on "GA" PWB is less than 136.5 ± 1.0 V DC.

5a) (G Board Models) If step 4a is not satisfied, replace R661 and repeat the above steps.

5b) (GA Board Models) If step 4b is not satisfied, replace R6088 and repeat the above steps.

SECTION 5
CIRCUIT ADJUSTMENTS

ELECTRICAL ADJUSTMENT BY REMOTE COMMANDER

Use Remote Commander (RM-Y149A, RM-Y168, RM-Y170, RM-Y171) to perform the following circuit adjustments:

NOTE : Test Equipment Required:

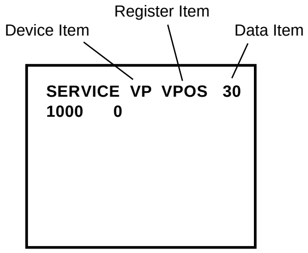
1. Pattern Generator
2. Frequency Counter
3. Digital Multimeter
4. Audio OSC

5-1. Method of Setting the Service Adjustment Mode

SERVICE MODE PROCEDURE

1. Standby mode. (Power off)
2. DISPLAY → 5 → VOL (+) → POWER on the Remote Commander.
   (Press each button within a second.)

SERVICE ADJUSTMENT MODE IN

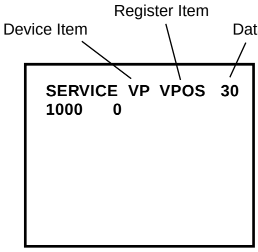

Register Item
Device Item
Data Item

SERVICE VP VPOS 30
1000 0

3. The CRT displays the item being adjusted.
4. Press 2 or 5 on the Remote Commander to select the device item.
5. Press 1 or 4 on the Remote Commander to select the item.
6. Press 3 or 6 on the Remote Commander to change the data.
7. If you want to recover the latest values press 0 then ENTER to read the memory.
8. Press MUTING then ENTER to write into memory**.

NOTE: If the NVM is replaced, perform test and reset, then download from microprocessor to NVM to prevent loss of picture.

SERVICE ADJUSTMENT MODE MEMORY


Register Item
Device Item
Data Item

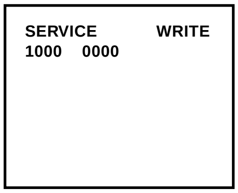
SERVICE VP VPOS 30
1000 0

MUTING Green

↓

ENTER Red

9. Press 8 then ENTER on the Remote Commander to reset.



SERVICE WRITE
1000 0000

Carry out step 9) when adjusting IDs 0 to 4 and when replacing and adjusting IC102.

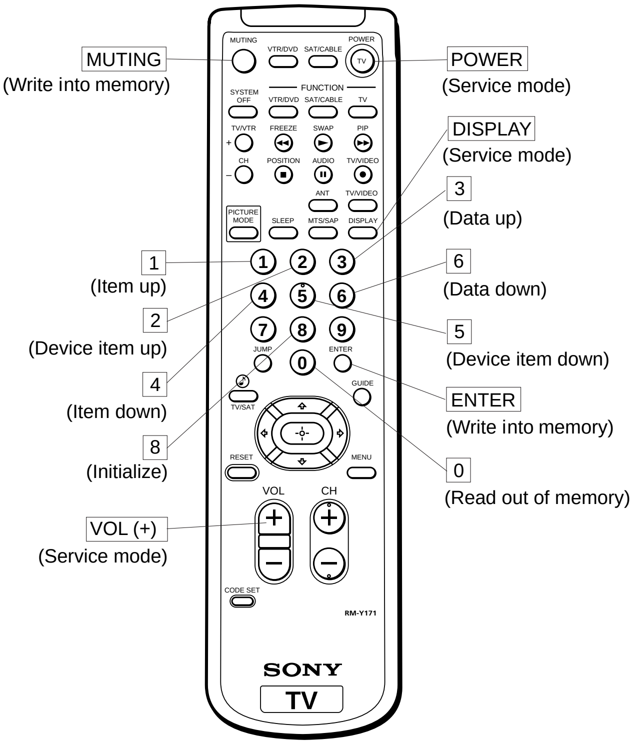
Factory original setting

10. Turn set off and on to exit.

5-2. Memory Write Confirmation Method

1. After adjustment, pull out the plug from the AC outlet, then replace the plug in the AC outlet again.
2. Turn the power switch ON and set to Service Mode.
3. Call the adjusted items again to confirm they were adjusted.

5.3. Adjust Buttons and Indicator


MUTING
(Write into memory)
1
(Item up)
2
(Device item up)
4
(Item down)
8
(Initialize)
VOL (+)
(Service mode)
POWER
(Service mode)
DISPLAY
(Service mode)
3
(Data up)
6
(Data down)
5
(Device item down)
ENTER
(Write into memory)
0
(Read out of memory)
MUTING
VTR/DVD
SAT/CABLE
POWER
TV
SYSTEM OFF
FUNCTION
TV/VTR
FREEZE
SWAP
PIP
CH
POSITION
AUDIO
TV/VIDEO
ANT
PICTURE MODE
SLEEP
MTS/SAP
DISPLAY
1
2
3
4
5
6
7
8
9
JUMP
0
ENTER
GUIDE
TV/SAT
RESET
MENU
VOL
CH
CODE SET
RM-Y171
SONY
TV

RM-Y171

**WARNING: Do NOT turn off the power or AC immediately after pressing MUTING then ENTER. Wait at least 10 seconds.

5-4. Service Data

No.	Register Name	Description	Data Range	Adj/Fix	Initial Data	Average Data**	Comments
						All Models	
		VP CXA2131S					
1	HPOS	Horizontal Position Adjust	0-31	Fix	**7**	7	
2	HSIZ	Horizontal Amp Adjust	0-31	Fix	**10**	10	
3	VBOW	VRT Line Bowing Adjust	0-15	Fix	**6**	6	
4	VANG	VRT Line Bow Slant Adjust	0-15	Fix	**5**	5	
5	TRAP	Horizontal Trapezoid Adjust	0-15	Fix	**6**	6	
6	PAMP	Horizontal Pin Distort Adjust	0-63	Fix	**32**	32	
7	UCPN	Upper Pin	0-63	Fix	**36**	36	
8	LCPN	Lower Pin	0-63	Fix	**36**	36	
9	VSIZ	Vertical Amplitude Adjust	0-63	Fix	**0**	0	
10	VPOS	Vertical Position Adjust	0-63	Fix	**31**	31	
11	VLIN	Vertical Linearity Adjust	0-15	Fix	**7**	7	
12	VSCO	S-Correction	0-15	Fix	**7**	7	
13	VZOM	16:9 CRT Z Mode On/Off	0,1	Fix	**0**	0	
14	EHT	VRT High Volt Correction	0-15	Fix	**4**	4	
15	ASP	Aspect Ratio Control	0-63	Fix	**47**	47	
16	SCRL	16:9 CRT Z Mode Tran Scroll	0-63	Fix	**31**	31	
17	HBSW	HBLK SW	0,1	Fix	**1**	1	
18	LBLK	Left Screen H Blk Control	0-15	Fix	**15**	15	
19	RBLK	Right Screen H Blk Control	0-15	Fix	**0**	0	
20	HDW	H Drive Pulse Width	0,1	Fix	**1**	1	
21	EWDC	EW/DC Adjust	0,1	Fix	**0**	0	
22	LVLN	Screen Bottom VRT Lin Adjust	0-15	Fix	**0**	0	
23	UVLN	Screen Top VRT Lin Adjust	0-15	Fix	**0**	0	
24	RDRV	R Output Drive Control	0-63	*Adj*	**31**	31	
25	GDRV	G Output Drive Control	0-63	*Adj*	**31**	31	
26	BDRV	B Output Drive Control	0-63	*Adj*	**31**	31	
27	RCUT	R Output Cutoff Control	0-15	*Adj*	**7**	7	
28	GCUT	G Output Cutoff Control	0-15	*Adj*	**7**	7	
29	BCUT	B Output Cutoff Control	0-15	*Adj*	**7**	7	
30	RDR4	Video 4 R Output Drive Control	0-63	*Adj*	**31**	31	
31	GDR4	Video 4 G Output Drive Control	0-63	*Adj*	**31**	31	
32	BDR4	Video 4 B Output Drive Control	0-63	*Adj*	**31**	31	
33	RCU4	Video 4 R Output Cutoff Control	0-15	*Adj*	**7**	7	
34	GCU4	Video 4 G Output Cutoff Control	0-15	*Adj*	**7**	7	
35	BCU4	Video 4 B Output Cutoff Control	0-15	*Adj*	**7**	7	
36	SHUE	Sub Hue	0-31	*Adj*	**15**	15	
37	SCOL	Sub Color	0-31	*Adj*	**15**	15	
38	SBRT	Sub Brightness	0-63	Fix	**15**	15	
39	RON	R Output On/Off	0,1	Fix	**1**	1	
40	GON	G Output On/Off	0,1	Fix	**1**	1	
41	BON	B Output On/Off	0,1	Fix	**1**	1	
42	AXPL	Axis Pal	0,1	Fix	**0**	0	
43	CBPF	Chroma BPF On/Off	0,1	Fix	**1**	1	
44	COFF	Color On/Off	0,1	Fix	**0**	0	
45	KOFF	Set Color Killer	0,1	Fix	**0**	0	
46	SSHP	Sub Sharpness	0-15	Fix	**7**	7	
47	SHPF	Sharpness Circuit F0	0,1	Fix	**1**	1	
48	PREL	Pre/Over-Shoot Switching	0,1	Fix	**1**	1	
49	Y-DC	DC Trans Ratio Switching	0,1	Fix	**1**	1	
50	ABLM	ABL Mode Switching	0,1	Fix	**1**	1	
51	YDEL	Y Delay Time Control	0-15	Fix	**7**	7	
52	NCOL	No Color ID	0,1	Fix	**1**	1	
53	FSC	FSC Out On/Off	0,1	Fix	**1**	1	
54	K-ID	Killer ID	0,1	Fix	**1**	1	
55	HOSC	H VCO Oscillation Frequency	0-15	Fix	**7**	7	
56	VSS	V Sync Slice Level	0,1	Fix	**0**	0	
57	HSS	H Sync Slice Level	0,1	Fix	**0**	0	
58	HMSK	H Mask	0,1	Fix	**1**	1	
59	VTMS	Select Signal VTIM Pin	0-3	Fix	**0**	0	

Service Data (cont.)

No.	Register Name	Description	Data Range	Adj/Fix	Initial Data	Average Data** All Models	Comments
		VP CXA2131S *continued*					
60	AFC	AFC Loop Gain	0-3	Fix	**0**	0	
61	FIFR	Field Frequency	0-3	Fix	**3**	3	
62	REFP	REFP	0,1	Fix	**0**	0	
63	VBSW	VBW	0-3	Fix	**0**	0	
64	BKOF	Blk Off	0,1	Fix	**0**	0	
65	AGN2	Aging 2	0,1	Fix	**0**	0	
66	YSHU	Hue for YUV Models	0-63	Fix	**31**	31	
		AP BH3868 (Group G,P - see table on page 28)					
67	BBLP	BBE Low Pass	0-15	Fix	**5**	5	
68	BBHP	BBE High Pass	0-15	Fix	**3**	3	
69	SVOL	Sub Volume	0-15	Fix	**15**	15	
70	SBAL	Sub Balance	0-15	Fix	**7**	7	
71	SBAS	Sub Bass	0-15	Fix	**8**	8	
72	STRE	Sub Treble	0-15	Fix	**8**	8	
		AP BH3868 (Group I,J,M,R,V - see table on page 28)					
67	BBLP	BBE Low Pass	0-15	Fix	**5**	5	
68	BBHP	BBE High Pass	0-15	Fix	**3**	3	
69	SVOL	Sub Volume	0-15	Fix	**7**	7	
70	SBAL	Sub Balance	0-15	Fix	**7**	7	
71	SBAS	Sub Bass	0-15	Fix	**8**	8	
72	STRE	Sub Treble	0-15	Fix	**8**	8	
		AP BH3868 (Group H,L,N,O,U,W,X - see table on page 28)					
67	BBLP	BBE Low Pass	0-15	Fix	**5**	5	
68	BBHP	BBE High Pass	0-15	Fix	**3**	3	
69	SVOL	Sub Volume	0-15	Fix	**7**	7	
70	SBAL	Sub Balance	0-15	Fix	**7**	7	
71	SBAS	Sub Bass	0-15	Fix	**5**	5	
72	STRE	Sub Treble	0-15	Fix	**5**	5	
		AP TDA7467					
73	SPCA	SRS/Space Attenuation	0-63	Fix	**0**	0	
74	CENA	SRS/Center Attenuation	0-63	Fix	**0**	0	
75	INPA	Input Attenuation	0-127	Fix	**3**	3	
		3D UPD64081					
76	HHDS	HH Off	0-3	Fix	**1**	1	
77	COUT	Gain 1/BPF On	0-3	Fix	**3**	3	
78	YAPS	V Comp/Y Eaking On	0-3	Fix	**3**	3	
79	NSDS	Adaptive	0-3	Fix	**0**	0	
80	MSS	Adaptive	0-3	Fix	**0**	0	
81	DYC	Hi Impedence	0-3	Fix	**2**	2	
82	EXAD	Ext Ad Selected	0,1	Fix	**1**	1	
83	PECS	Standard	0-3	Fix	**0**	0	
84	EXCS	Use CSI Just In Case	0-3	Fix	**1**	1	
85	CPP	VTB = 1.25VPP	0-3	Fix	**0**	0	
86	HDP	H Phase +/- 0 μ sec	0-7	Fix	**3**	3	
87	CDL	Y/C Delay +/- 0 μ sec	0-7	Fix	**4**	4	
88	DYCO	Y Moving Coring	0-15	Fix	**2**	2	
89	DYGA	Y Moving Gain	0-15	Fix	**10**	10	
90	DCCO	C Moving Coring	0-15	Fix	**2**	2	
91	DCGA	C Moving Gain	0-15	Fix	**9**	9	
92	YNRK	Effect Small	0,1	Fix	**1**	1	
93	YNRI	Effect Small	0.1	Fix	**0**	0	
94	YNRL	Noise Limit	0-3	Fix	**1**	1	
95	CNRK	Effect Small	0,1	Fix	**1**	1	
96	CNRI	Effect Small	0,1	Fix	**0**	0	
97	CNRL	CNR Limit	0-3	Fix	**1**	1	
98	ID1O	ID 1 Through	0,1	Fix	**0**	0	
99	ID1W	4:03	0,1	Fix	**0**	0	
100	ID1N	Normal	0,1	Fix	**0**	0	
101	CLK	Low Fix	0,1	Fix	**1**	1	
102	ST1S	Monitor Out	0-3	Fix	**0**	0	
103	ST0S	Monitor Out	0-3	Fix	**1**	1	
104	WSC	Coring	0-3	Fix	**1**	1	
105	VTRH	H Non Standard DET	0-3	Fix	**1**	1	
106	VTRR	H Non Standard DET	0-3	Fix	**1**	1	
107	LDSR	Frame	0-3	Fix	**2**	2	
108	PWRE	PWRE	0,1	Fix	**0**	0	
109	PDRE	PDRE	0-7	Fix	**4**	4	
110	PBRE	PBRE	0-15	Fix	**8**	8	
111	VAPG	V Apacon Gain	0-7	Fix	**3**	3	
112	VAPI	V Apacon	0-31	Fix	**10**	10	
113	TEST	Test	0,1	Fix	**0**	0	
114	YPFT	Y Peaking	0-3	Fix	**3**	3	

Service Data (cont.)

No.	Register Name	Description	Data Range	Adj/Fix	Initial Data	Average Data**	Comments
						All Models	
		3D UPD64081 *continued*					
115	YPFG	Y Peaking Gain	0-15	Fix	10	10	
116	V1PS	Line Comb Dot H	0-3	Fix	2	2	
117	VEGS	Line Comb Dot V	0-3	Fix	2	2	
118	CC3N	C Width	0,1	Fix	0	0	
119	C0HS	C Delay On	0,1	Fix	0	0	
120	CLPH	Y-Ad Clamp Test	0,1	Fix	0	0	
121	SEL2	DC Sensitivity Small	0,1	Fix	0	0	
122	SEL1	DY Sensitivity Small	0,1	Fix	0	0	
123	YHCO	Coring Small	0-3	Fix	1	1	
124	YPCO	Coring On	0,1	Fix	0	0	
125	ED2O	Standard	0,1	Fix	1	1	
126	OVST	Standard	0,1	Fix	0	0	
127	CSHD	Standard	0,1	Fix	0	0	
128	KCTT	Standard	0-3	Fix	0	0	
129	SHT1	Standard	0,1	Fix	0	0	
130	SHT0	Standard	0,1	Fix	0	0	
131	VCT	Standard	0,1	Fix	0	0	
132	OTT	Standard	0,1	Fix	0	0	
133	CGAT	Standard	0,1	Fix	0	0	
134	CGGT	Standard	0,1	Fix	0	0	
135	CGFT	Standard	0,1	Fix	0	0	
136	CGT	Standard	0,1	Fix	0	0	
137	HPLL	H PLL Fast	0,1	Fix	1	1	
138	BPLL	Burst PLL Fast	0,1	Fix	0	0	
139	FSCF	Burst Gain Large	0,1	Fix	0	0	
140	PLLF	PLL Loop Gain Large	0,1	Fix	1	1	
141	KILR	Killer Level	0-15	Fix	3	3	
142	HSSL	H Slice Level	0-15	Fix	12	12	
143	VSSL	V Slice Level	0-15	Fix	8	8	
144	BGPS	Start Burst Gate	0-15	Fix	4	4	
145	BGPW	Width of Burst Gate	0-15	Fix	10	10	
146	ADCL	ADC Clock	0-3	Fix	3	3	
147	ADPD	ADC Power Down On	0,1	Fix	1	1	
148	ADLT	Standard	0,1	Fix	0	0	
149	NRZO	Check On	0,1	Fix	0	0	
150	FSCO	Level Check On	0,1	Fix	0	0	
151	VTVH	Normal	0-3	Fix	0	0	
152	TST2	Standard	0,1	Fix	0	0	
153	HMEM	Use	0,1	Fix	1	1	
154	HINV	Polarity of Reset	0,1	Fix	1	1	
155	HTMG	Field Memory Address	0,1	Fix	0	0	
156	HCP	HH Carrier Phase	0-15	Fix	7	7	
157	TST3	Test	0,1	Fix	0	0	
158	HHMG	HH Moving Gain	0,1	Fix	1	1	
159	HHFG	HH	0-3	Fix	0	0	
160	HHTG	Max HH	0-15	Fix	5	5	
		PI TA1226N					
161	SHPR	Picture Improvement Sharpness	0-127	Fix	59	59	
162	BLAD	Picture Improvement Black Area Detect	0-3	Fix	0	0	
163	SRTS	Picture Improvement SRT Start Pos	0-3	Fix	3	3	
164	YNR	Picture Improvement YNR	0,1	Fix	1	1	
165	GIRE	Picture Improvement Gamma Start Point	0-3	Fix	3	3	
166	DAC1	Picture Improvement DAC1	0,1	Fix	0	0	
167	DAC2	Picture Improvement DAC2	0,1	Fix	0	0	
168	GCUR	Picture Improvement Gamma Curve	0,1	Fix	0	0	
169	BLKC	Picture Improvement Black Compensation	0,1	Fix	1	1	
170	TEST	Picture Improvement Test	0-3	Fix	3	3	
171	RS	Picture Improvement RS	0-7	Fix	0	0	
172	RTC	Picture Improvement RTC	0-7	Fix	4	4	

Service Data (cont.)

No.	Register Name	Description	Data Range	Adj/Fix	Initial Data	Average Data** All Models	Comments
		DC CXA2060					
173	**DCSF**	**Dynamic Convergence DC Shift**	0-63	**Fix**	**40**	40	
174	**UYBW**	**Dynamic Convergence Upper YBOW**	0-63	**Fix**	**31**	31	
175	**LYBW**	**Dynamic Convergence Lower YBOW**	0-63	**Fix**	**31**	31	
176	**HAMP**	**Dynamic Convergence H. Amp**	0-63	**Fix**	**15**	15	
177	**UCBW**	**Dynamic Convergence U. CBOW**	0-63	**Fix**	**21**	21	
178	**LCBW**	**Dynamic Convergence L. CBOW**	0-63	**Fix**	**14**	14	
179	**UMBH**	**Dynamic Convergence U. MBH**	0-63	**Fix**	**15**	15	
180	**LMBH**	**Dynamic Convergence L. MBH**	0-63	**Fix**	**15**	15	
181	**PWM**	**Dynamic Convergence PWM**	0-63	**Fix**	**63**	63	
182	**HTLT**	**Dynamic Convergence H. Tilt**	0-63	**Fix**	**1**	1	
183	**UTLT**	**Dynamic Convergence U. Tilt**	0-63	**Fix**	**1**	1	
184	**LTLT**	**Dynamic Convergence L. Tilt**	0-63	**Fix**	**1**	1	
185	**HDTY**	**Dynamic Convergence H. Duty**	0-3	**Fix**	**3**	3	
186	**TOFF**	**Dynamic Convergence Tilt Off**	0,1	**Fix**	**1**	1	
187	**DAC0**	**Dynamic Convergence DAC0**	0-255	**Fix**	**192**	192	
188	**DAC1**	**Dynamic Convergence DAC1**	0-255	**Fix**	**7**	7	
		SP SDA9288					
189	**PYSD**	**P in P (Siemens) YS Delay**	0-15	**Fix**	**2**	2	
190	**PIPH**	**P in P (Siemens) H-Position**	0-127	**Fix**	**78**	78	
191	**PIPV**	**P in P (Siemens) V-Position**	0-63	**Fix**	**18**	18	
192	**PYDL**	**P in P (Siemens) Y-Delay**	0-7	**Fix**	**0**	0	
193	**PIFX**	**P in P Inset Fixed**	0-3	**Fix**	**2**	2	
194	**PPFX**	**P in P Parent Fixed**	0-3	**Fix**	**2**	2	
195	**PCLI**	**P in P CLISW**	0,1	**Fix**	**1**	1	
196	**PAMS**	**P in P AMSEC**	0,1	**Fix**	**0**	0	
197	**PHDL**	**P in P (Siemens) H-Pulse Delay (Inset)**	0-15	**Fix**	**15**	15	
198	**PMVD**	**P in P (Siemens) V-Pulse Delay (Main)**	0-31	**Fix**	**11**	11	
199	**PIVD**	**P in P (Siemens) V-Pulse Delay (Inset)**	0-31	**Fix**	**18**	18	
200	**PCON**	**P in P (Siemens) Contrast Level (Inset)**	0-15	**Fix**	**7**	1	
201	**FRMY**	**P in P (Siemens) Frame Y**	0-15	**Fix**	**10**	10	
202	**CHRI**	**P in P (Siemens) Chroma Input Polarity**	0,1	**Fix**	**0**	0	
203	**CHRO**	**P in P (Siemens) Chroma Output Polarity**	0,1	**Fix**	**0**	0	
204	**MAT0**	**P in P (Siemens) MAT0**	0,1	**Fix**	**1**	1	
205	**MAT1**	**P in P (Siemens) MAT1**	0,1	**Fix**	**1**	1	
206	**MAT2**	**P in P (Siemens) MAT2**	0,1	**Fix**	**0**	0	
207	**IPER**	**P in P (Siemens) Pedastel R-Y**	0-15	**Fix**	**0**	0	
208	**IPEB**	**P in P (Siemens) Pedastel B-Y**	0-15	**Fix**	**0**	0	
209	**PCPS**	**P in P (Siemens) CLP & HSIDEL**	0,1	**Fix**	**0**	0	
210	**PCPF**	**P in P (Siemens) CLP Cycles**	0,1	**Fix**	**0**	0	
211	**PSEL**	**P in P (Siemens) SELDOWN**	0,1	**Fix**	**1**	1	
212	**PPLL**	**P in P (Siemens) PLL Filter**	0-3	**Fix**	**0**	0	
213	**PVNR**	**P in P (Siemens) VSP Pulse Noise Red.**	0,1	**Fix**	**0**	0	

Note: PIP Setting - IC SDA9288 *continued*

SERVICE MODE ITEM IC (SDA9288)	Model Groups 32V / 34V / 36V / 38V
PHDL (HSI DELAY)	**15**
PMVD (VSP DELAY)	**11**
PIVD (VSI DELAY)	**18**
PCON (CONTRAST)	**1**

		IC CXA2019					
214	**IDPX**		0,1	**Fix**	**0**	0	
215	**ICOL**	**Color**	0-63	**Fix**	**38**	38	
216	**ISHP**	**Sharpness**	0-15	**Fix**	**10**	10	
217	**ISCO**	**Sub Chroma Decoder Sub Cont**	0-15	**Fix**	**7**	7	
218	**ISCL**	**Sub Chroma Decoder Sub Color**	0-15	**Fix**	**12**	8	
219	**ISHU**	**Sub Chroma Decoder Sub Hue**	0-15	**Fix**	**7**	7	
220	**ITOT**	**Sub Chroma Decoder Tot On**	0,1	**Fix**	**0**	0	
221	**ITRP**	**Sub Chroma Decoder Trap On**	0,1	**Fix**	**1**	1	
222	**IAFC**	**AFC**	0-3	**Fix**	**1**	1	
223	**ITRA**	**Sub Chroma Decoder CTRAPADJ**	0-15	**Fix**	**7**	7	
224	**ICD2**	**Sub Chroma Decoder CD Mode2**	0,1	**Fix**	**1**	1	
225	**ISF0**	**SHP-F0**	0,1	**Fix**	**1**	1	
226	**IYDR**	**Sub Chroma Decoder Y Drive**	0-31	**Fix**	**24**	24	
227	**IVPE**	**Sub Chroma Decoder V Ped**	0-15	**Fix**	**0**	0	
228	**IUPE**	**Sub Chroma Decoder U Ped**	0-15	**Fix**	**0**	0	
229	**IRVP**	**Sub Chroma Decoder RV Ped**	0-15	**Fix**	**7**	7	
230	**IRUP**	**Sub Chroma Decoder RU Ped**	0-15	**Fix**	**4**	7	

Service Data (cont.)

No.	Register Name	Description	Data Range	Adj/Fix	Initial Data	Average Data**	Comments
						All Models	
		IC CXA2019 *continued*					
231	IDCT	Sub Chroma Decoder DC Tran	0-7	Fix	6	6	
232	IRYD	Sub Chroma Decoder RY Drive	0-31	Fix	19	19	
233	IPRE	Sub Chroma Decoder Pre Over	0-3	Fix	1	1	
234	IRUD	Sub Chroma Decoder RU Drive	0-31	Fix	8	8	
235	IRVD	Sub Chroma Decoder RV Drive	0-31	Fix	8	8	
236	IDLY	Sub Chroma Decoder Delay	0-3	Fix	0	0	
237	ISCR	Sub Chroma Decoder SCP BGR	0-3	Fix	1	1	
238	ISCF	Sub Chroma Decoder SCP BGF	0-3	Fix	1	1	

Note: PIP Setting - IC CXA2019 *continued*

SERVICE MODE ITEM IC (CXA2019AQ)	Model Groups 32V / 34V / 36V / 38V
ICSL (SUB-COLOR)	8
IVPE (V PEDESTAL)	0
IUPE (U PEDESTAL)	0
IRVP (V PEDESTAL2)	7
IRUP (U PEDESTAL2)	7
IDCT (DC TRAN)	6

No.	Register Name	Description	Data Range	Adj/Fix	Initial Data	Average Data**	Comments
		DA CXA1315					
239	RTCO	D/A Converter N-S Correction	0-63	Fix	32	32	
240	2COL	Color	0-255	Fix	120	120	
241	4COL	Color	0-255	Fix	120	120	
242	2SHU	Sub Hue	0-31	Fix	15	15	
243	4SHU	Sub Hue	0-31	Fix	15	15	
		D1 CXD2085					
244	XJGL	XJGLK	0,1	Fix	0	0	
245	LNJ1	LNJ1	0,1	Fix	0	0	
		CC CXP85856A					
246	CRIL	CCD CRI Pulse Compare Data Low	0-15	Fix	2	2	
247	CFLD	CCD Caption Fixed-Field Count	0-15	Fix	5	5	
248	CCDI	CCD No CCD Interrupt	0-7	Fix	3	3	
249	CRIP	CCD CRI & Parity Error	0-7	Fix	4	4	
250	CRIT	CCD CRI Time Constant	0-3	Fix	0	0	
251	CSB1	CCD Sync Slice Bias 1	0-3	Fix	3	3	
252	CSB2	CCD Sync Slice Bias 2	0-7	Fix	4	4	
253	CREP	CCD CRI Signal End Position	0-256	Fix	142	142	
254	CDSD	CCD Data Start Delay	0-31	Fix	8	8	
255	CCDS	CCD Caption Data Threshold	0-31	Fix	9	9	
256	CHMK	CCD P8-HMASK	0-63	Fix	42	42	
257	CHSY	CCD P8-HSYC	0-255	Fix	136	136	
		OP CXP85856A					
258	DISP	OSD Position	0-63	*Adj*	1	1	
		ID MAP					
259	ID 0	NVM ID 0	0-255	Fix by model	89	89	See ID map
260	ID 1	NVM ID 1	0-255	Fix by model	55	55	See ID map
261	ID 2	NVM ID 2	0-255	Fix by model	175	175	See ID map
262	ID 3	NVM ID 3	0-255	Fix by model	96	96	See ID map
263	ID 4	NVM ID 4	0-255	Fix by model	203	203	See ID map
264	ID 5	NVM ID 5	0-255	Fix by model	181	181	See ID map
265	ID 6	NVM ID 6	0-255	Fix by model	6	6	See ID map
266	ID 7	NVM ID 7	0-255	Fix by model	9	9	See ID map

(5) Feature ID Map

	ID 0	ID 1	ID 2	ID 3	ID 4	ID 5	ID 6	ID 7
KV-32FS10	89	63	47	96	203	177	0	0
KV-32FS10CND	89	63	47	112	203	177	0	0
KV-34FV10	25	63	175	64	251	177	0	0
KV-32FV15	89	63	175	96	203	181	6	0
KV-32FV15CND	89	63	175	112	203	181	6	0
KV-34FV15	25	63	175	64	251	181	6	0
KV-34FV15C	25	63	175	64	251	181	6	0
KV-34FV15T	9	63	175	64	219	181	6	0
KV-34FV15K	137	63	175	64	219	181	6	0
KV-32XBR250	89	63	175	96	203	181	6	9
KV-32XBR250CND	89	63	175	112	203	181	6	9
KV-34FX250C	25	63	175	64	251	181	6	9
KV-36FS10	89	63	47	96	203	177	0	0
KV-36FS10CND	89	63	47	112	203	177	0	0
KV-36FV15	89	63	175	96	203	181	6	0
KV-36FV15CND	89	63	175	112	203	181	6	0
KV-38FV15K	137	63	175	64	219	181	6	0
KV-36XBR250	89	63	175	96	203	181	6	9
KV-36XBR250CND	89	63	175	112	203	181	6	9
KV-38FX250	25	63	175	64	251	181	6	9
KV-38FX250C	25	63	175	64	251	181	6	9
KV-38FX250T	9	63	175	64	219	181	6	9

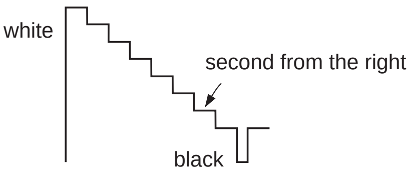
SERVICE IDO 25

Note: Items 1-266 show adjustment order

GROUP	FEATURES	NAME
G	32inchx120Vac	KV-32FS10 (8978(U)/8979(CND))
H	32inchxAUTO	KV-34FV10 (8980(E))
I	32inchx120VacxPIP	KV-32FV15 (8973(U)/8974(CND))
J	32inchx120VacxPIPxNO V Chip	KV-34FV15T (10189(WB))
K	32inchx120VacxPIPx3D	KV-32XBR250 (8969(U)/8970(CND))
L	32inchxAUTOxPIP	KV-34FV15 (8975(E), KV-34FV15C (8977(E))
M	32inchxAUTOxPIPxKOREA	KV-34FV15K (10188(K))
N	32inchxAUTOxPIPx3D	KV-34FX250C (8972(E))
P	36inchx120Vac	KV-36FS10 (8989(U)/8990(CND))
R	36inchx120VacxPIP	KV-36FV15 (8987(U)/8988(CND))
S	36inchx120VacxPIPx3D	KV-36XBR250 (8981(U)/8982(CND))
T	36inchx120VacxPIPx3DxNO V Chip	KV-38FX250T (10190(WB))
U	36inchxAUTOxPIPx3D	KV-38FX250 (8983(E), KV-38FX250C (8986(EW))
V	36inchxAUTOxPIP	KV-38FV15K (10191(K))

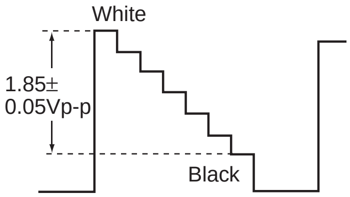
SUB BRIGHT ADJUSTMENT (SBRT)

1. Set to Service adjustment Mode.
2. Input a gray scale pattern signal.
3. Set the PICTURE to minimum, and BRIGHT to normal.
4. Select SBRT with 1 and 4 .
5. Adjust SUB BRIGHT level with 3 and 6 so that the stripe second from the right is faintly visible.
6. Write into the memory by pressing MUTING then ENTER.



SUB CONTRAST ADJUSTMENT (RDRV)

1. Input a 75% color-bar signal.
2. Set to VIDEO mode = STANDARD, COLOR = minimum, PICTURE = 100%.
   GON = 0 (OFF), BON = 0 (OFF).
3. Set to Service adjustment Mode and Connect an oscilloscope pin ① of CN351 on A Board.
4. Select RDRV with 1 and 4 .
5. Adjust with 3 and 6 for the 1.85 ± 0.05Vp-p of level.
6. Write into the memory by MUTING then ENTER.

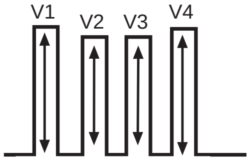


SUB HUE, SUB COLOR ADJUSTMENT (2SHU, 2COL, 4SHU, 4COL)

NOTE: 4SHU and 4COL are for Video 4 input.
2SHU and 2COL are for all other inputs.

1. Input a color bar signal.
2. Set to Service Adjustment Mode and set to
   VIDEO mode = STANDARD
   PICTURE = 100%
   COLOR = 50%
   HUE = 50%.
3. Connect an oscilloscope to CN351 Pin ③ of A Board.
4. Select SHUE and SCOL with 1 and 4 .
5. Adjust with 3 and 6 for the V1 = V4 (2COL) and V2 = V3 (2SHU).
6. Write SHUE data 1 step down from even condition to NVM. 2COL is adjusted by 2SHU compensation.
7. Write into the memory by pressing MUTING then ENTER.

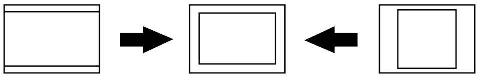
NOTE: Procedure for 4SHU and 4COL is same as above.



H. SIZE ADJUSTMENT (HSIZ)

1. Input a monoscope signal.
2. Set to Service Adjustment Mode.
3. Select HSIZ with 1 and 4 .
4. Adjust with 3 and 6 for the best Horizontal size.
5. Write into the memory by pressing MUTING then ENTER.

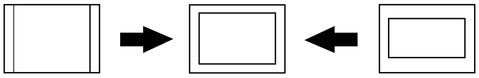
H. SIZE



V. SIZE ADJUSTMENT (VSIZ)

1. Input a monoscope signal.
2. Set to Service Adjustment mode.
3. Select VSIZ with 1 and 4 .
4. Adjust with 3 and 6 for the best vertical size.
5. Write into the memory by pressing MUTING then ENTER.

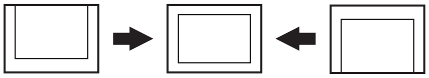
V. SIZE



V. POSITION ADJUSTMENT (VPOS)

1. Input a monoscope signal.
2. Set to Service Adjustment Mode.
3. Select VPOS with 1 and 4 .
4. Adjust with 3 and 6 for the best vertical center.
5. Write into the memory by pressing MUTING then ENTER.

V. POSITION

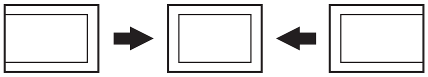


H. POSITION ADJUSTMENT (HPOS)

HPOS data range is from 0~15.

1. Input a monoscope signal.
2. Set the Service adjustment Mode.
3. Select HPOS with 1 and 4 .
4. Adjust with 3 and 6 for the best horizontal center.
5. Write into the memory by pressing MUTING then ENTER.

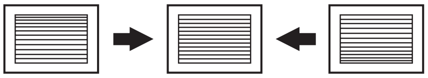
H. POSITION



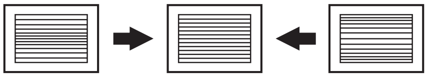
V LINEARITY (VLIN), V CORRECTION (VSCO), PIN AMP (PAMP) AND TRAPEZIUM (TRAP) ADJUSTMENTS

1. Input a cross-hatch signal.
2. Set to Service adjustment Mode.
3. Select VLIN, VSCO, PAMP, and TRAP with 1 and 4.
4. Adjust with 3 and 6 for the best picture.
5. Write the memory by Pressing MUTING then ENTER.

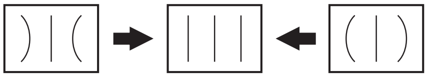
V LINEARITY(VLIN)



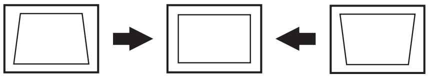
VS CORRECTION (VSCO)



PIN AMP (PAMP)



TRAPEZIUM (TRAP)

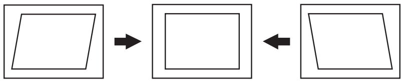


V ANGLE (VANG), V BOW (VBOW), UPPER PIN (UCPN) AND LOW PIN (LCPN) ADJUSTMENTS

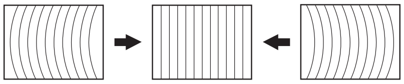
1. Input a cross hatch signal.
2. Set to Service Adjustment Mode.
3. Select VVANG, VBOW, UCPN, and LCPN with 1 and 4 .
4. Adjust with 3 and 6 for the best picture.
5. Write the memory by Pressing MUTING then ENTER.

Please use VANG data from 3~12. Adjust from 3 to12 only.

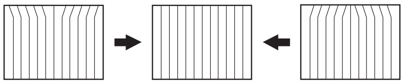
V ANGLE (VANG)



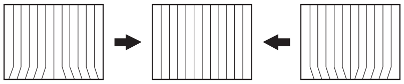
V BOW (VBOW)



UPPER PIN (UCPN)

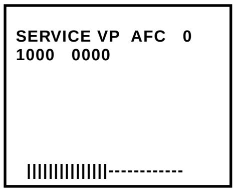


LOW PIN (LCPN)



OSD POSITION ADJUSTMENT (DISP)

1. Input a color bar signal.
2. Set to Service adjustment Mode.
3. Select DISP with 1 and 4.
4. Adjust with 3 and 6 for the bar center.
5. Write into the memory by pressing MUTING then ENTER .



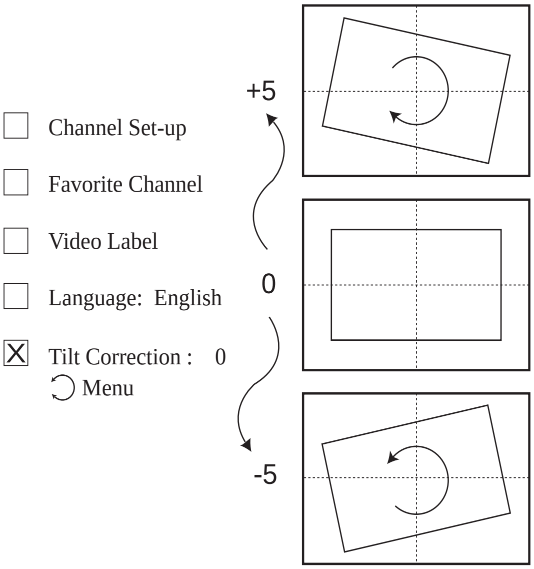
```
SERVICE VP  AFC   0
1000   0000

IIIIIIIIIIIIII------------
```

ROTATION COIL ADJUSTMENT

1. Input a monoscope signal.
2. Push Menu button on the Remote (RM-Y171).
3. Select "Set Up" Mode.
4. Select "Tilt Correction". Confirm that number (0) color changes to red.
5. Push ⬆ (+) on the Remote (RM-Y171). Confirm that number increases up to +5 and picture rotates clockwise.
6. Push ⬇ (+) on the Remote (RM-Y171). Confirm that number decreases up to -5 and picture rotates counterclockwise.
7. Push ⬆ (+) on the Remote (RM-Y171). Return to 0.

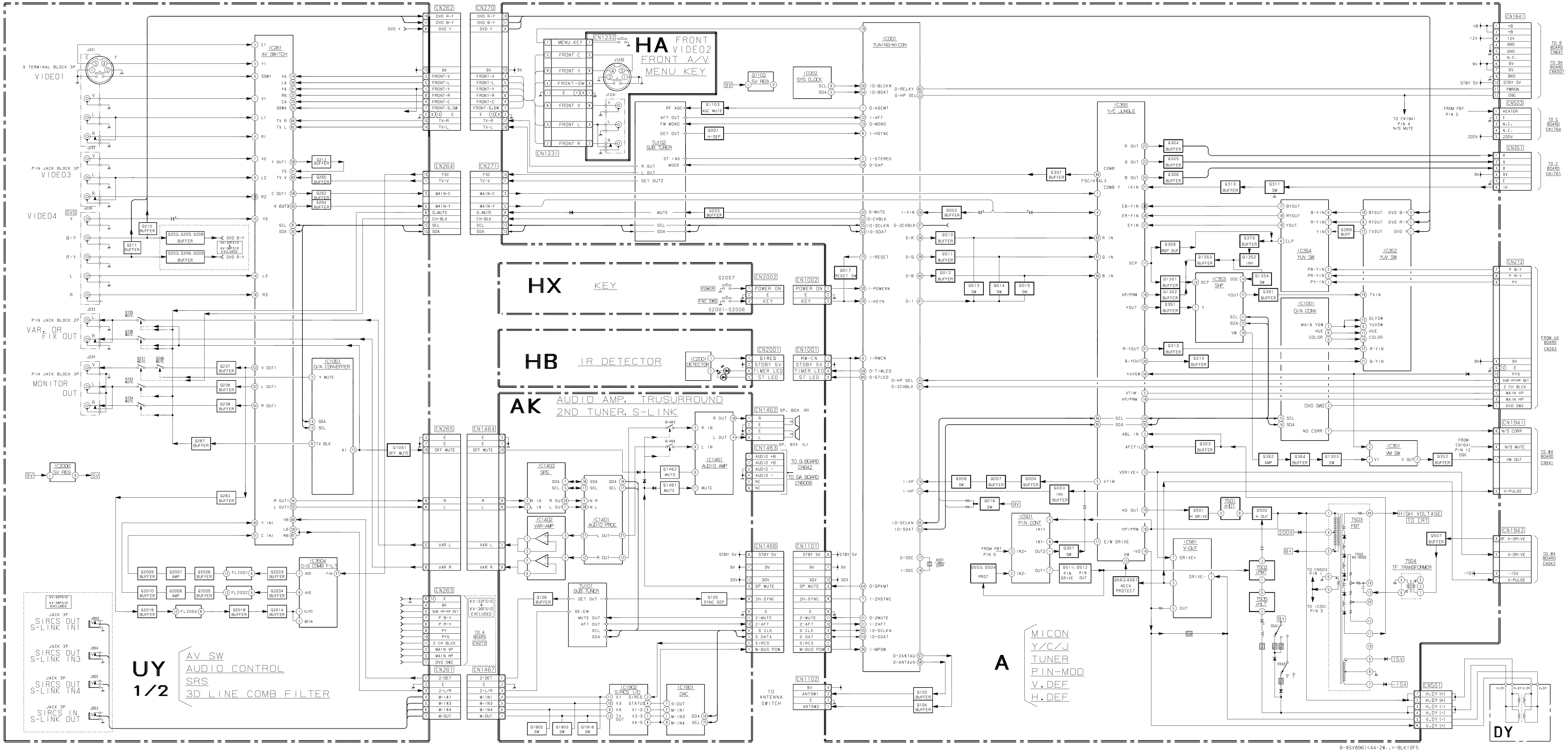
SET-UP



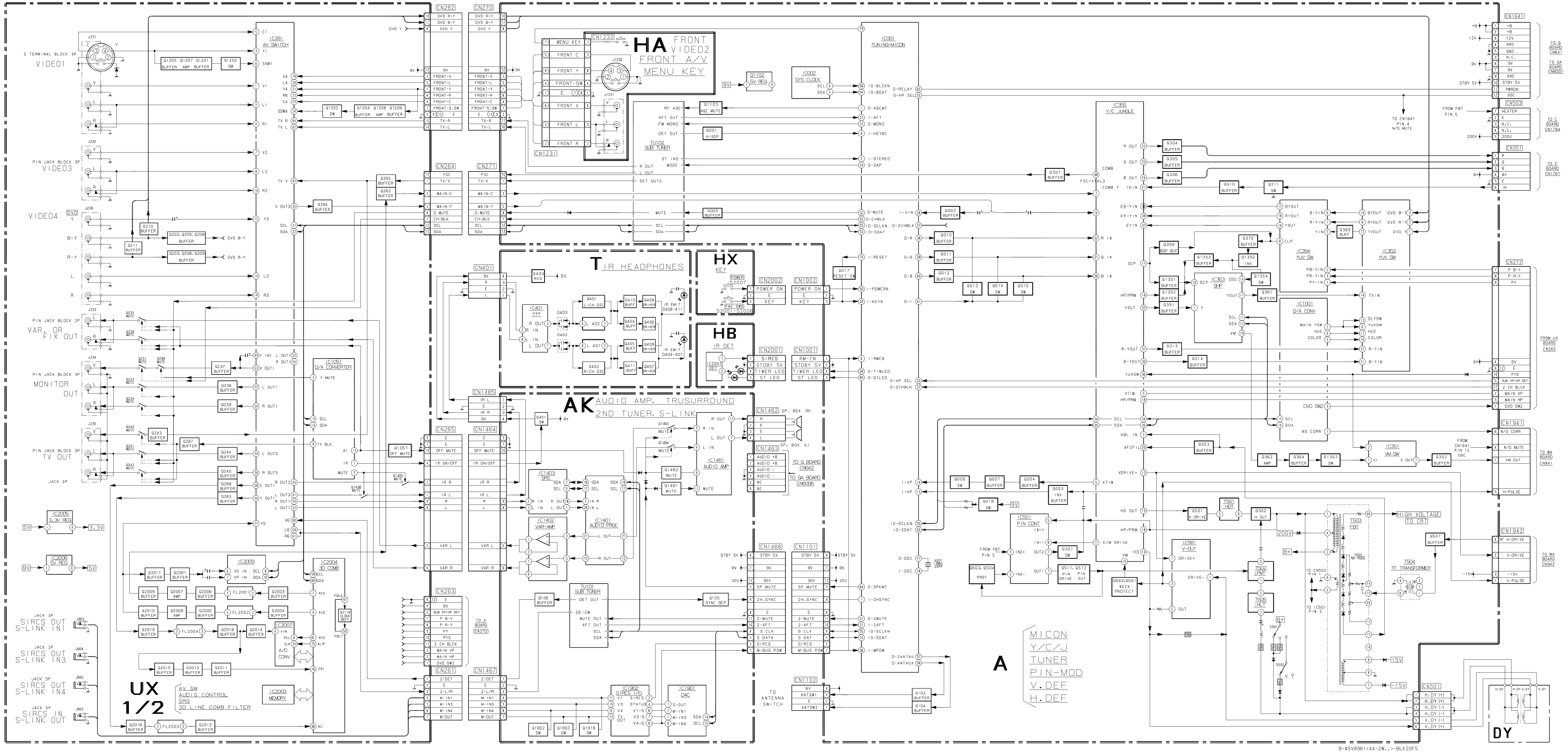
☐ Channel Set-up
☐ Favorite Channel
☐ Video Label
☐ Language: English
☒ Tilt Correction : 0
Menu

SECTION 6 DIAGRAMS

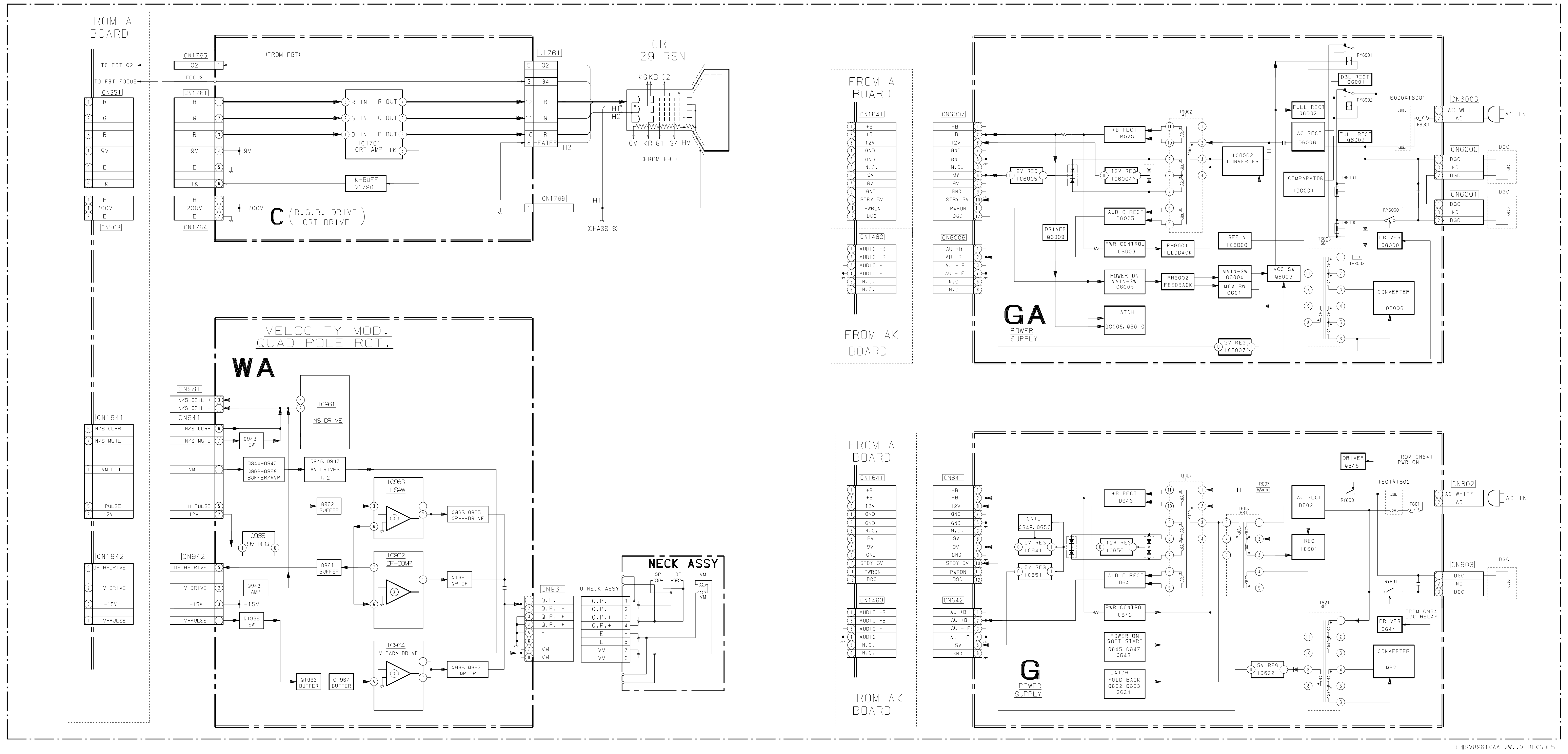
6-1 BLOCK DIAGRAM (1/5) (KV-32FS10/32FV15/34FV10/34FV15/34FV15C/34FV15K/34FV15T/36FS10/36FV15/38FV15K)


UY 1/2
AV SW
AUDIO CONTROL
SRS
3D LINE COMB FILTER
S TERMINAL BLOCK 3P
VIDEO1
PIN JACK BLOCK 3P
VIDEO3
VIDEO4
PIN JACK BLOCK 2P
VAR. OR FIX OUT
PIN JACK BLOCK 3P
MONITOR OUT
IC261 AV SWITCH
IC1051 D/A CONVERTER
IC2006 5V REG
IC3504 DIG COMB FILT
JACK 3P SIRCS OUT S-LINK IN1
JACK 3P SIRCS OUT S-LINK IN3
JACK 3P SIRCS OUT S-LINK IN4
JACK 3P SIRCS IN S-LINK OUT
KV-32FS10 KV-36FS10 EXCLUDED
CN262
CN270
CN264
CN271
CN265
CN1464
CN263
CN261
CN1467
HA
FRONT VIDEO2
FRONT A/V
MENU KEY
CN1232
CN1231
TU102 SUB TUNER
HX
KEY
S2007
S2001-S2006
CN2002
CN1002
HB
IR DETECTOR
IC2001 DETECTOR
CN2001
CN1001
AK
AUDIO AMP, TRUSURROUND
2ND TUNER, S-LINK
IC1403 SRS
IC1402 VAR-AMP
IC1401 AUDIO PROC
IC1461 AUDIO AMP
TU101 SUB TUNER
IC1902 SIRCS I/O
IC1901 DAC
CN1462 SP. BOX (R)
CN1463 SP. BOX (L)
TO G BOARD CN942
TO GA BOARD CN6006
CN1466
CN1101
CN1102
TO ANTENNA SWITCH
A
MICON
Y/C/J
TUNER
PIN-MOD
V.DEF
H.DEF
IC001 TUNING-MICON
IC002 SYS CLOCK
Q1102 5V REG
IC355 Y/C JUNGLE
IC354 YUV SW
IC352 YUV SW
IC353 SHP
IC1001 D/A CONV
IC351 VM SW
IC501 PIN CONT
IC561 V-OUT
T501 IHDT
T502 IPMT
T503 FBT
T504 TF TRANSFORMER
T505 LHLT
HIGH VOLTAGE TO CRT
CN1641
TO B BOARD CN641
TO GA BOARD CN6007
CN503
TO C BOARD CN764
CN351
TO C BOARD CN761
CN272
FROM UX BOARD CN263
CN1941
TO WA BOARD CN941
CN1942
TO WA BOARD CN942
CN501
DY
B-#SV8961<AA-2W..>-BLK1OFS

6-2 BLOCK DIAGRAM (2/5) (KV-32XBR250/34FX250C/36XBR250/38FX250/38FX250C/38FX250T)

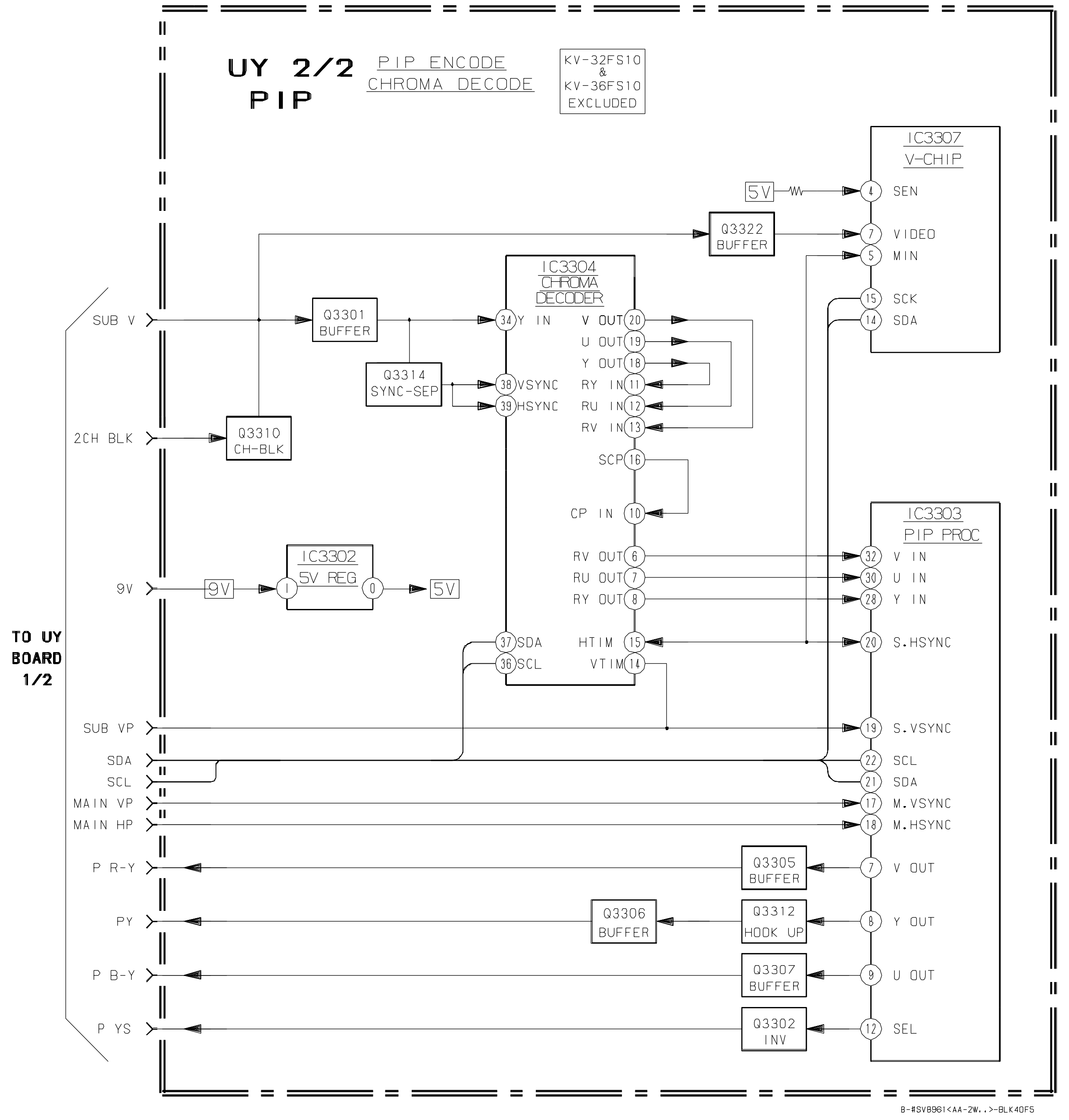

HA FRONT VIDEO2 FRONT A/V MENU KEY
T IR HEADPHONES
HX KEY
HB IR DET
AK AUDIO AMP, TRUSURROUND 2ND TUNER, S-LINK
UX 1/2 AV SW AUDIO CONTROL SRS 3D LINE COMB FILTER
A MICON Y/C/J TUNER PIN-MOD V.DEF H.DEF
DY
VIDEO1
VIDEO3
VIDEO4
VAR. OR FIX OUT
MONITOR OUT
TV OUT
SIRCS OUT S-LINK IN1
SIRCS OUT S-LINK IN3
SIRCS OUT S-LINK IN4
SIRCS IN S-LINK OUT
HIGH VOLTAGE TO CRT

6-3 BLOCK DIAGRAM (3/5) (ALL MODELS)


FROM A BOARD
C
(R.G.B. DRIVE CRT DRIVE)
CRT 29 RSN
IC1701 CRT AMP
IK-BUFF Q1790
(FROM FBT)
HEATER
(CHASSIS)
CN1941
CN1942
WA
VELOCITY MOD. QUAD POLE ROT.
IC981 NS DRIVE
IC962 H-SAW
IC963 DF-COMP
IC964 V-PARA DRIVE
IC965 5V REG
NECK ASSY
CN961
TO NECK ASSY
FROM A BOARD
FROM AK BOARD
GA
POWER SUPPLY
CN6007
CN6008
CN6003
CN6005
CN6001
IC6002 CONVERTER
IC6001 COMPARATOR
LATCH Q6009,Q6010
5V REG IC6007
AC IN
FROM A BOARD
FROM AK BOARD
G
POWER SUPPLY
CN641
CN642
CN602
CN603
AC IN
B-#SV8961<AA-2W..>-BLK3OF5

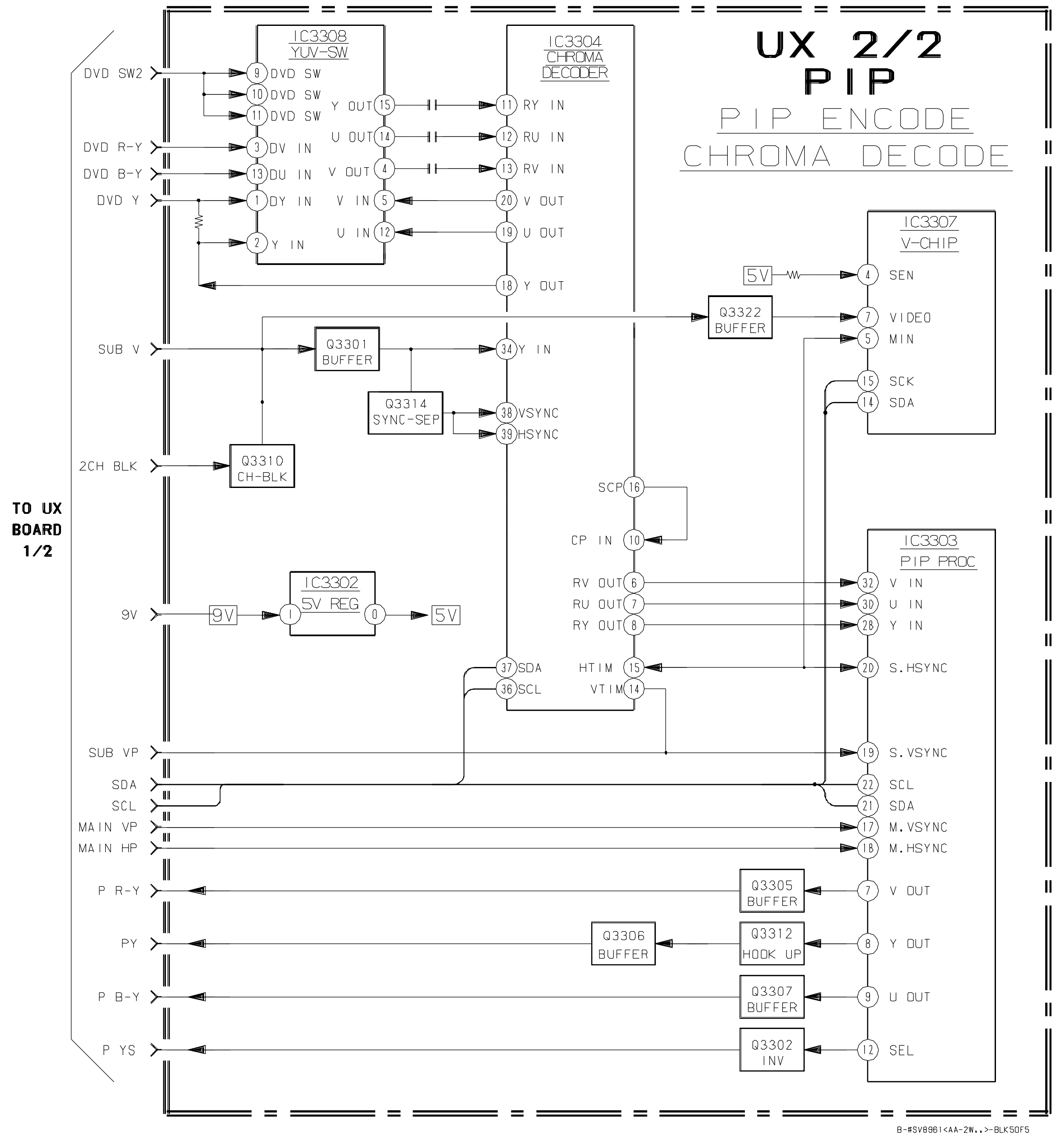
6-4 BLOCK DIAGRAM (4/5)

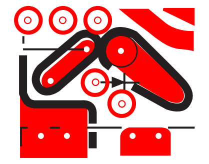
(KV-32FV15/34FV15/34FV15C/34FV15K/34FV15T/36FV15/38FV15K)


UY 2/2 PIP
PIP ENCODE CHROMA DECODE
KV-32FS10 & KV-36FS10 EXCLUDED
TO UY BOARD 1/2
SUB V
2CH BLK
9V
SUB VP
SDA
SCL
MAIN VP
MAIN HP
P R-Y
PY
P B-Y
P YS
Q3301 BUFFER
Q3314 SYNC-SEP
Q3310 CH-BLK
IC3302 5V REG
9V
5V
IC3304 CHROMA DECODER
34 Y IN
38 VSYNC
39 HSYNC
37 SDA
36 SCL
20 V OUT
19 U OUT
18 Y OUT
11 RY IN
12 RU IN
13 RV IN
16 SCP
10 CP IN
6 RV OUT
7 RU OUT
8 RY OUT
15 HTIM
14 VTIM
Q3322 BUFFER
IC3307 V-CHIP
4 SEN
7 VIDEO
5 MIN
15 SCK
14 SDA
IC3303 PIP PROC
32 V IN
30 U IN
28 Y IN
20 S.HSYNC
19 S.VSYNC
22 SCL
21 SDA
17 M.VSYNC
18 M.HSYNC
7 V OUT
8 Y OUT
9 U OUT
12 SEL
Q3305 BUFFER
Q3306 BUFFER
Q3312 HOOK UP
Q3307 BUFFER
Q3302 INV
B-#SV8961<AA-2W..>-BLK4OF5

6-5 BLOCK DIAGRAM (5/5)

(KV-32XBR250/34FX250C/36XBR250/38FX250/38FX250C/38FX250T)

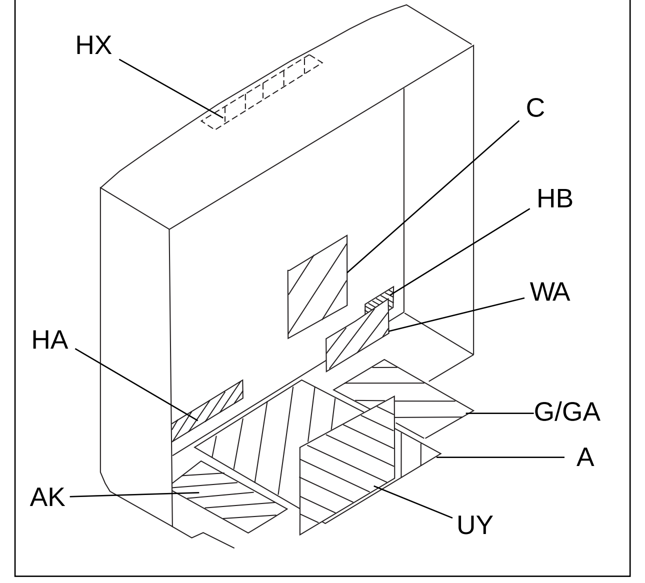

UX 2/2
PIP
PIP ENCODE
CHROMA DECODE
TO UX BOARD 1/2
DVD SW2
DVD R-Y
DVD B-Y
DVD Y
SUB V
2CH BLK
9V
SUB VP
SDA
SCL
MAIN VP
MAIN HP
P R-Y
PY
P B-Y
P YS
IC3308 YUV-SW
DVD SW
DV IN
DU IN
DY IN
Y IN
Y OUT
U OUT
V OUT
V IN
U IN
IC3304 CHROMA DECODER
RY IN
RU IN
RV IN
V OUT
U OUT
Y OUT
Y IN
VSYNC
HSYNC
SCP
CP IN
RV OUT
RU OUT
RY OUT
SDA
SCL
HTIM
VTIM
IC3307 V-CHIP
5V
SEN
VIDEO
MIN
SCK
SDA
Q3322 BUFFER
Q3301 BUFFER
Q3314 SYNC-SEP
Q3310 CH-BLK
IC3302 5V REG
9V
5V
IC3303 PIP PROC
V IN
U IN
Y IN
S.HSYNC
S.VSYNC
SCL
SDA
M.VSYNC
M.HSYNC
V OUT
Y OUT
U OUT
SEL
Q3305 BUFFER
Q3306 BUFFER
Q3312 HOOK UP
Q3307 BUFFER
Q3302 INV
B-#SV8961<AA-2W..>-BLK5OF5



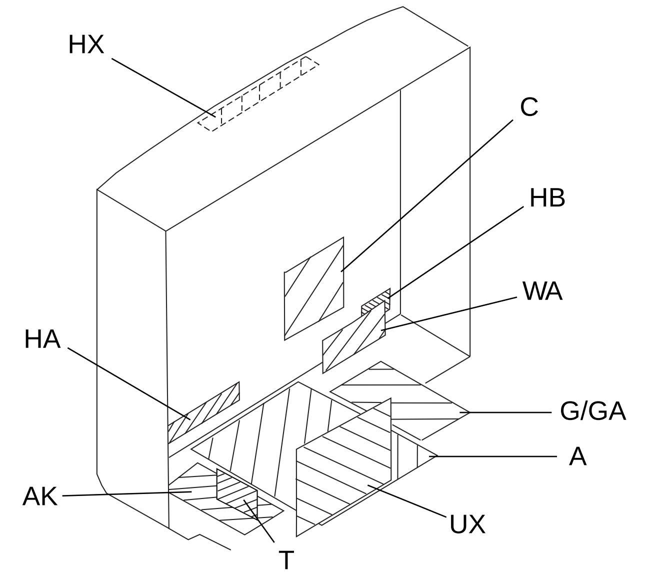
NOTE:
Portions of this circuit marked as shown are high voltage areas. Use care to prevent electric shocks during inspection or repair.

6-6. CIRCUIT BOARDS LOCATION

ALL MODELS (Except KV-32XBR250/34FX250C 36XBR250/38FX250/38FX250C/38FX250T


HX
C
HB
WA
HA
G/GA
A
AK
UY

(KV-32XBR250/34FX250C/36XBR250 38FX250/38FX250C/38FX250T ONLY)


HX
C
HB
WA
HA
G/GA
A
AK
UX
T

6-7. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All electrolytics are in 50V unless otherwise specified.
- All resistors are in ohms.
  KΩ=1000Ω, MΩ=1000kΩ
- Indication of resistance, which does not have one for rating electrical power, is as follows:

Pitch : 5mm Rating electrical power : $^1/_4$ W

- $^1/_4$ W in resistance, $^1/_{10}$ W and $^1/_8$ W in chip resistance.
- : nonflammable resistor.
- : fusible resistor.
- △ : internal component.
- ▭ : panel designation and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- The components identified by ⧓ in this basic schematic diagram have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation.
  Should replacement be required, replace only with the value originally used.
- When replacing components identified by ◪ , make the necessary adjustments indicated. If results do not meet the specified value, change the component identified by ⧓ and repeat the adjustment until the specified value is achieved. (Refer to R530 and R531 adjustment on Page 21.)
- When replacing the part in below table, be sure to perform the related adjustment.
- Readings are taken with a color-bar signal input.
- Readings are taken with a 10MΩ digital multimeter.
- Voltages are DC with respect to ground unless otherwise noted.
- Voltage variations may be noted due to normal production tolerances.

Part replaced (◪)	Adjustment(⧓)
IC355, IC501, D302, D519, D520, D521,C531, C532, Q301, R356, R359, R361, R387, R529, R530, R531, R532, R533, R550,T503 ....A BOARD IC643, R661...G BOARD IC6003, R6088.......................................GA BOARD	R530,R531

- All voltages are in V.
  S : Measurement impossibility.
- ▬▬ : B+line.
- ▬ ▬ ▬ : B-line.
  (Actual measured value may be different).
- ⇨ : signal path. (RF)
- Circled numbers are waveform references.

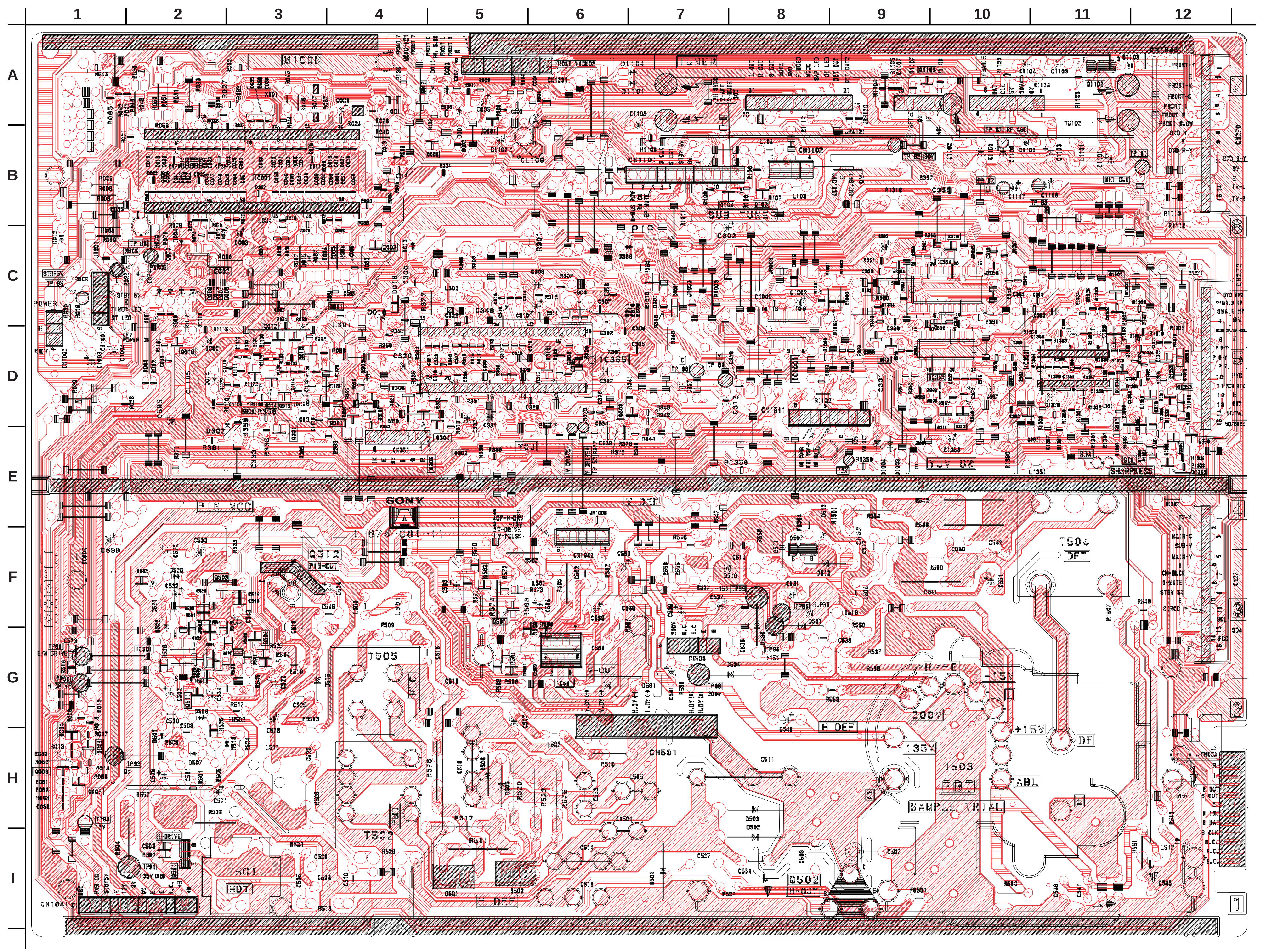
Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RW	NONFLAMMABLE WIREWOUND
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: ※	ADJUSTMENT RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

The symbol display is on the component side.
The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.
The symbol indicates a fast operating fuse.
Replace only with fuse of same rating as marked.

Les composants identifiés per un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.
Le symbole indique une fusible a action rapide. Doit etre remplacee par une fusible de meme yaleur, comme maque.

A [MICON, Y/C/J, TUNER, PIN-MOD, V-DEF, H-DEF]


1
2
3
4
5
6
7
8
9
10
11
12
A
B
C
D
E
F
G
H
I
MICON
TUNER
PIN MOD
V DEF
H DEF
SONY
A
T504
T503
T502
T501
T505

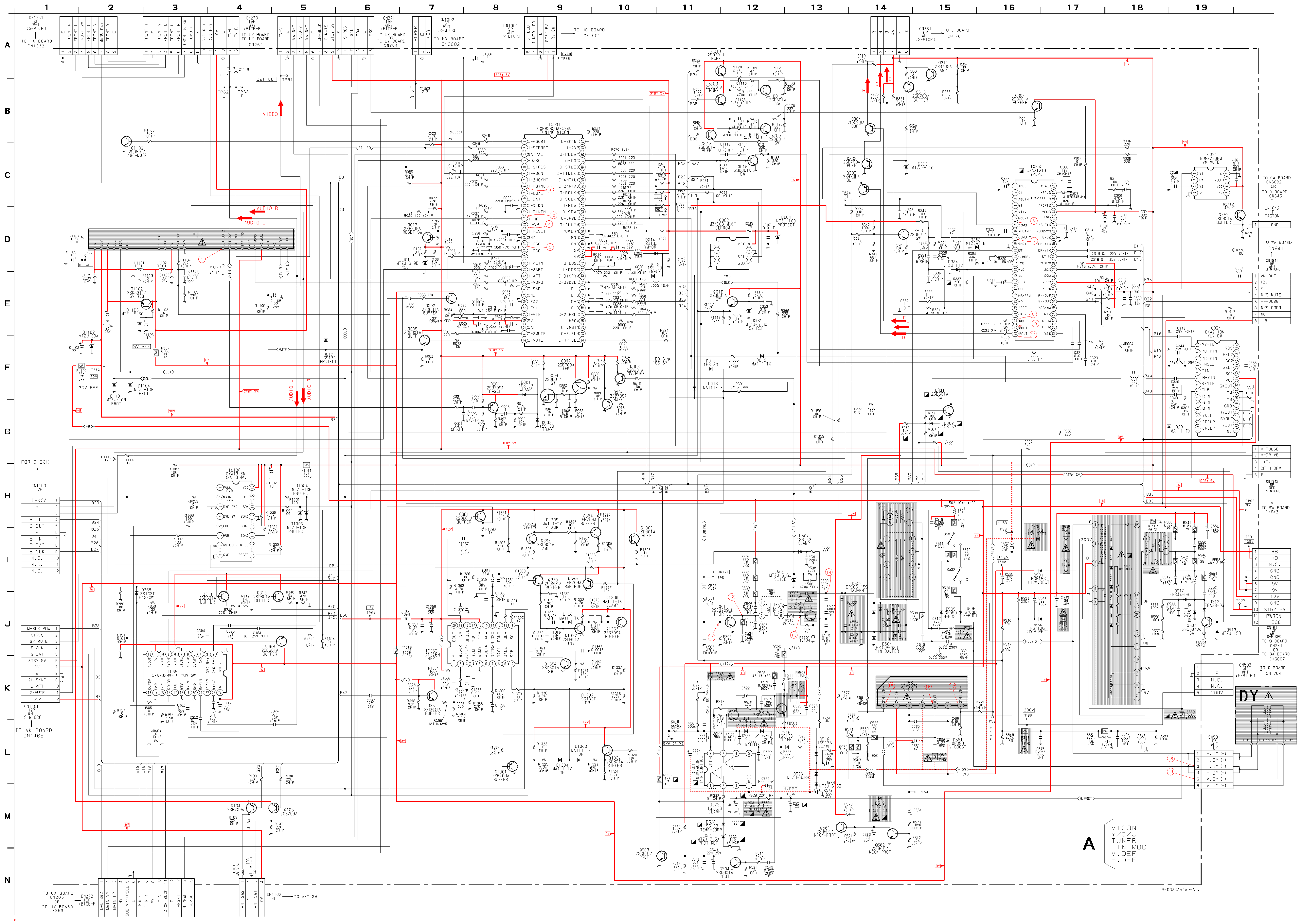
A BOARD LOCATOR LIST

DIODE	
D001	A-5
D002	D-2
D003	A-5
D004	C-2
D011	A-5
D012	C-1
D013	C-5
D014	D-3
D015	C-3
D016	D-4
D018	D-4
D019	C-8
D301	C-7
D302	E-3
D303	D-4
D368	C-7
D384	F-6
D388	C-6
D501	H-2
D502	I-8
D503	I-8
D504	I-7
D505	I-6
D506	H-5
D507	H-2
D510	F-8
D511	F-9
D512	F-9
D513	F-9
D515	G-4
D516	H-2
D518	H-3
D519	G-9
D520	F-2
D521	F-2
D522	G-2
D523	H-3
D524	H-3
D530	G-8
D531	G-9
D534	G-8
D535	G-3
D536	G-3
D561	H-7
D1003	E-10
D1004	E-10
D1101	A-7
D1102	B-11
D1103	A-12
D1104	A-7
D1301	D-12
D1302	D-11

IC	
IC001	B-2
IC002	C-2
IC352	D-9
IC353	D-10
IC354	C-9
IC355	D-5
IC501	G-2
IC561	G-6
IC1001	D-8

TRANSISTOR	
Q001	A-5
Q002	C-4
Q003	H-1
Q004	H-1
Q005	B-5
Q006	H-1
Q007	I-1
Q010	D-3
Q011	D-3
Q012	D-3
Q013	D-3
Q014	D-3
Q015	D-3
Q016	D-2
Q017	A-5
Q103	B-8
Q104	B-8
Q301	E-3
Q303	E-7
Q304	E-5
Q305	E-5
Q306	E-5
Q307	C-6
Q310	E-4
Q311	E-4
Q314	E-9
Q351	E-10
Q359	E-12
Q361	D-10
Q362	E-11
Q364	E-12
Q369	D-8
Q370	D-11
Q501	I-2
Q502	J-9
Q503	G-3
Q504	G-3
Q507	F-9
Q511	H-2
Q512	F-3
Q561	G-6
Q562	F-5
Q1102	A-12
Q1103	A-10
Q1301	D-11
Q1302	D-11
Q1303	E-12
Q1352	D-11
Q1353	D-11
Q1354	D-10

A BOARD SCHEMATIC DIAGRAM


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
A
B
C
D
E
F
G
H
I
J
K
L
M
N
DY
A
MICON
Y/C/J
TUNER
PIN-MOD
V.DEF
H.DEF

A BOARD IC VOLTAGE LIST

IC001	
pin	volt
1	0
2	5.0
3	0
4	0
5	NC
6	3.9
7	0.1
8	0
9	NC
10	NC
11	NC
12	5.0
13	4.0
14	5.0
15	5.0
16	GND
17	2.5
18	2.5
19	5.0
20	5.0
21	2.0
22	2.5
23	0
24	0
25	GND
26	0
27	0
28	2.3
29	5.0
30	0
31	0
32	0
33	0
34	NC
35	NC
36	0
37	0
38	0
39	0
40	0
41	0
42	0
43	0
44	4.7
45	4.7
46	4.9
47	4.9
48	GND
49	GND
50	5.0
51	0
52	0
53	4.7
54	4.7
55	4.7
56	4.7
57	5.0
58	0
59	3.8
60	3.8
61	0
62	4.7
63	NC
64	0

IC002	
pin	volt
1	GND
2	GND
3	GND
4	GND
5	4.7
6	4.7
7	GND
8	5.0

IC351	
pin	volt
1	5.8
2	0.3
3	5.3
4	GND
5	NC
6	9.4
7	5.0
8	GND

IC352	
pin	volt
1	5.8
2	5.8
3	5.8
4	GND
5	NC
6	0.1
7	GND
8	NC
9	3.9
10	3.9
11	9.0
12	3.1
13	0.1
14	GND
15	2.4
16	4.4
17	4.7
18	GND
19	6.0
20	GND
21	5.8
22	5.8
23	5.8
24	9.0

IC353	
pin	volt
1	4.5
2	3.7
3	4.9
4	4.5
5	GND
6	NC
7	4.5
8	NC
9	NC
10	1.3
11	4.7
12	4.7
13	GND
14	11.4
15	5.6
16	11.7
17	7.6
18	1.3
19	3.6
20	2.0

IC354	
pin	volt
1	4.0
2	4.0
3	4.0
4	0.3
5	4.0
6	4.0
7	4.0
8	2.2
9	NC
10	NC
11	NC
12	NC
13	NC
14	NC
15	NC
16	3.9
17	3.9
18	3.9
19	GND
20	0
21	0
22	NC
23	9.0
24	NC
25	NC
26	NC
27	NC
28	NC

IC355	
pin	volt
1	3.5
2	NC
3	1.5
4	NC
5	5.0
6	NC
7	4.5
8	4.8
9	5.3
10	GND
11	3.4
12	2.4
13	3.5
14	3.5
15	5.8
16	7.6
17	1.2
18	3.5
19	1.9
20	2.5
21	2.0
22	1.3
23	1.2
24	1.2
25	0
26	4.7
27	4.7
28	4.7
29	NC
30	4.3
31	4.3
32	3.7
33	9.1
34	4.7
35	4.7
36	7.3
37	4.8
38	5.5
39	5.5
40	GND
41	NC
42	7.3
43	NC
44	9.3
45	5.5
46	5.1
47	1.9
48	NC

IC501	
pin	volt
1	-3.5
2	8.2
3	8.0
4	-13.8
5	2.3
6	2.9
7	13.6
8	14.0

IC561	
pin	volt
1	1.4
2	14.0
3	-11.9
4	-13.8
5	0.4
6	14.4
7	1.4

IC1001	
pin	volt
1	NC
2	0.1
3	0.3
4	NC
5	4.4
6	4.7
7	4.7
8	GND
9	9.3
10	NC
11	9.3
12	9.3
13	GND
14	4.7
15	4.7
16	9.3

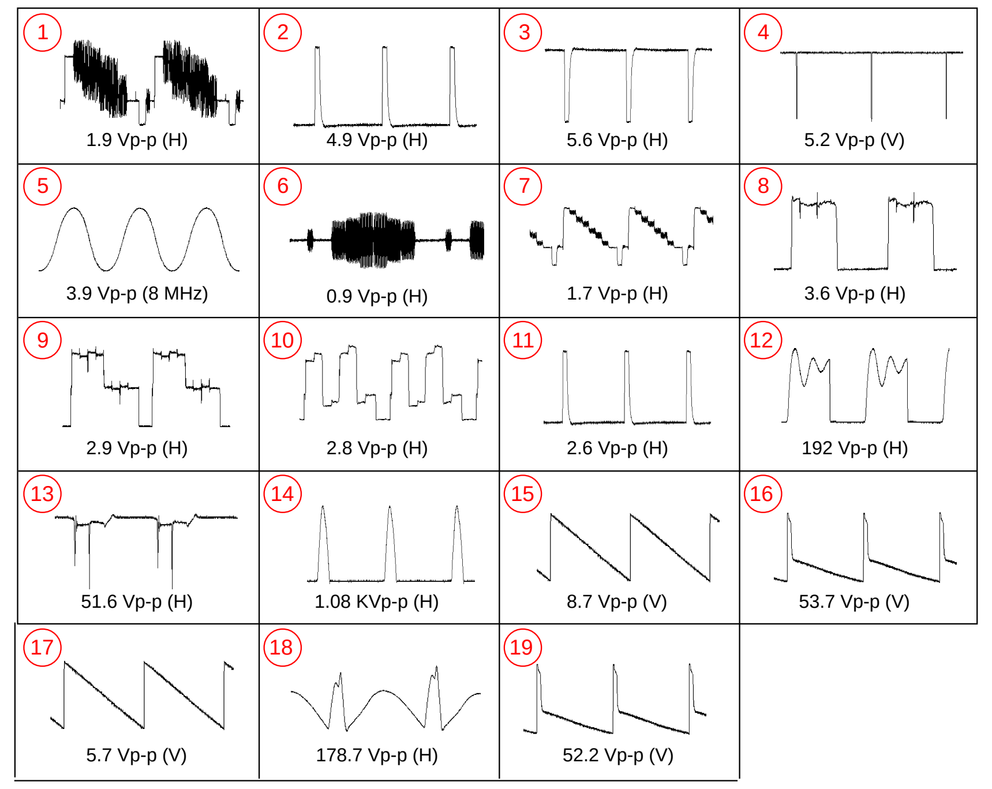
All voltages are in V

A BOARD TRANSISTOR VOLTAGE LIST

	B	C	E
Q001	5.0	0.7	5.0
Q002	4.7	9.3	4.1
Q003	-0.4	4.0	GND
Q004	5.0	GND	5.0
Q005	0	5.0	0
Q006	0	5.0	GND
Q007	5.0	0	5.0
Q010	0	9.4	0
Q011	0	9.4	0
Q012	0	9.4	0
Q013	0	0	GND
Q014	0	0	GND
Q015	0	0	GND
Q016	5.8	9.4	5.1
Q017	4.4	5.0	5.0
Q103	4.3	4.9	5.0
Q104	5.0	0	5.0
Q301	-0.7	3.5	GND
Q303	4.3	10.5	3.7
Q304	1.3	GND	1.9
Q305	1.2	GND	1.9
Q306	11	GND	1.8
Q307	5.1	9.4	4.4
Q310	3.7	2.0	4.3
Q311	3.7	GND	4.3
Q312	0.1	0.1	GND
Q313	4.3	9.0	3.7
Q314	4.3	9.0	3.7
Q351	6.6	9.0	5.9
Q352	5.0	9.4	4.3
Q359	1.6	GND	2.3
Q361	7.6	11.7	6.9
Q362	5.7	11.7	6.3
Q364	10.1	4.9	10.7
Q369	3.1	9.0	2.5
Q370	2.3	11.8	1.8
Q501	-0.8	107.4	GND
Q502	-0.2	135.0	GND
Q503	0	8.2	GND
Q504	-1.1	0	GND
Q507	0.3	0.3	GND
Q511	-13.6	-11.1	-13.9
Q512	-14.1	27.4	-13.9
Q561	0	5.8	GND
Q562	-0.2	0	GND
Q1102	5.8	8.9	5.1
Q1103	0	5.0	GND
Q1301	1.2	GND	1.9
Q1302	0.2	11.7	0.7
Q1303	4.9	11.7	4.3
Q1352	-2.2	10.6	GND
Q1353	11.9	0.5	11.7
Q1354	-0.1	0	GND

All voltages are in V

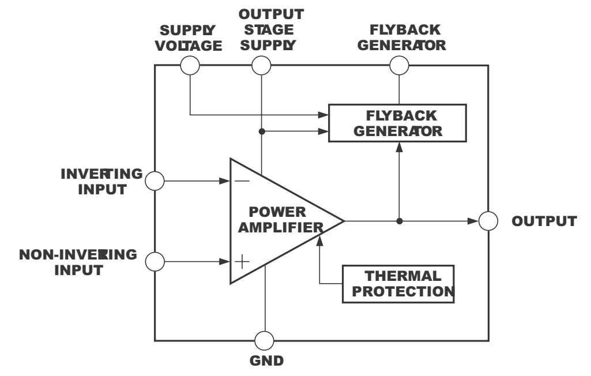
A BOARD WAVEFORMS



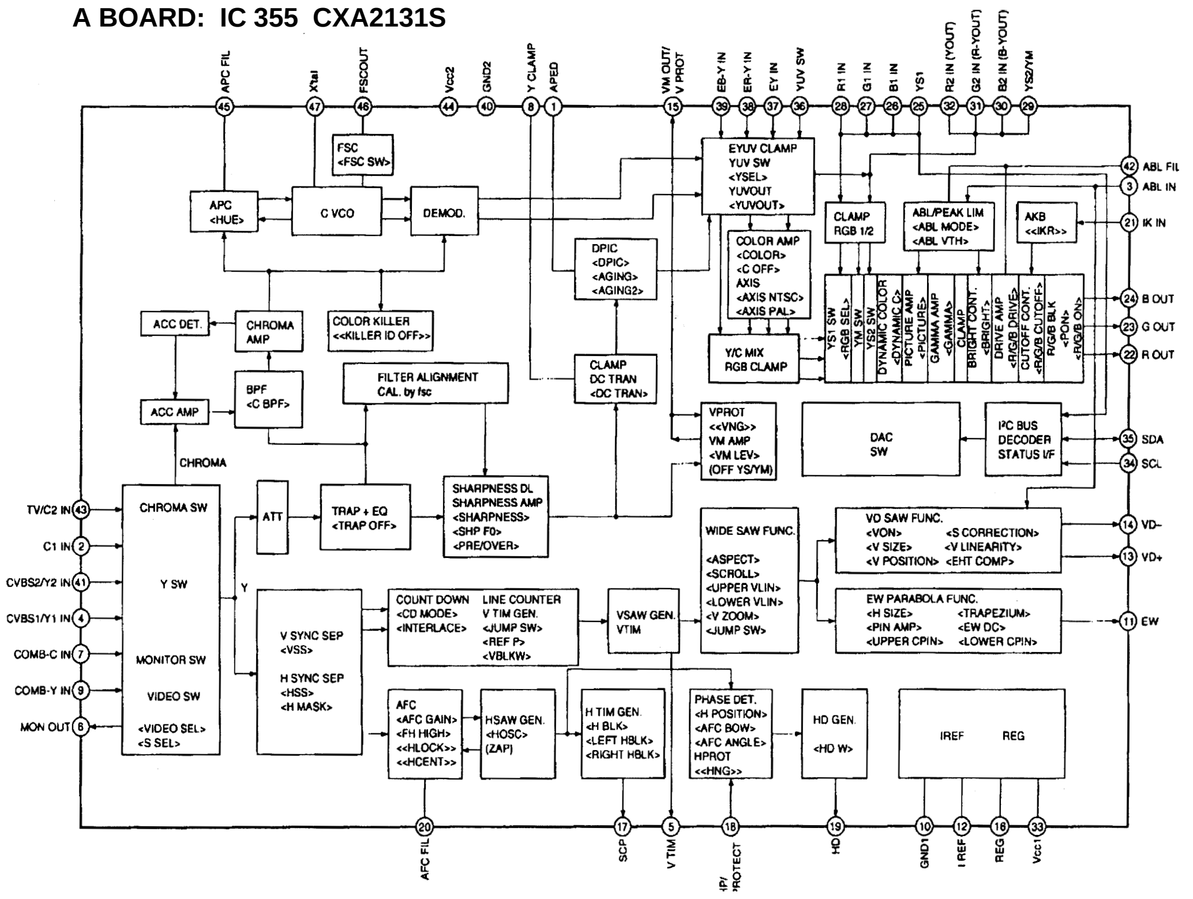
A BOARD (*) MARK LIST

REF. NO.	LOCATION	KV-32FS10	KV-36XBR250	KV-34FV15K	KV-34FV15T	KV-38FV1
TU102	D-3	#	#	8-598-475-11	8-598-477-11	8-598-475

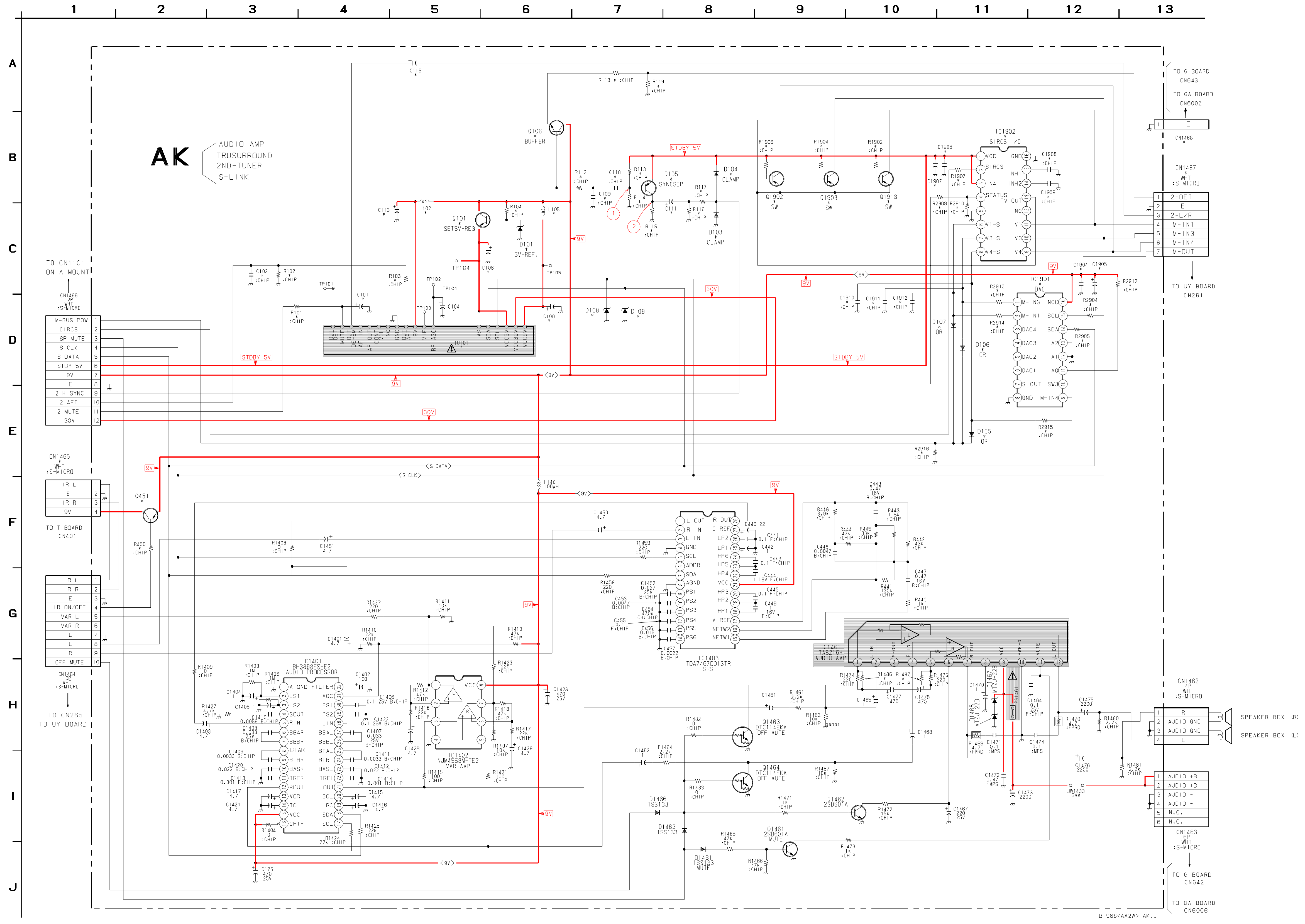
A BOARD: IC 561 STV9379


SUPPLY VOLTAGE
OUTPUT STAGE SUPPLY
FLYBACK GENERATOR
FLYBACK GENERATOR
INVERTING INPUT
NON-INVERTING INPUT
POWER AMPLIFIER
THERMAL PROTECTION
OUTPUT
GND

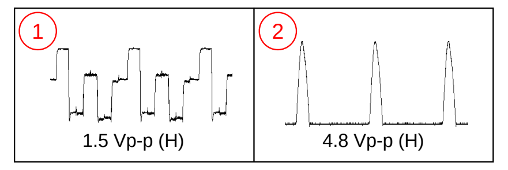
A BOARD: IC 355 CXA2131S


APC FIL 45
X'tal 47
FSCOUT 46
Vcc2 44
GND2 40
Y CLAMP 8
APED 1
VM OUT/ V PROT 15
EB-Y IN 39
ER-Y IN 38
EY IN 37
YUV SW 36
R1 IN 28
G1 IN 27
B1 IN 26
YS1 25
R2 IN (YOUT) 32
G2 IN (R-YOUT) 31
B2 IN (B-YOUT) 30
YS2/YM 29
FSC <FSC SW>
APC <HUE>
C VCO
DEMOD.
EYUV CLAMP YUV SW <YSEL> YUVOUT <YUVOUT>
CLAMP RGB 1/2
ABL/PEAK LIM <ABL MODE> <ABL VTH>
AKB <<IKR>>
42 ABL FIL
3 ABL IN
21 IK IN
DPIC <DPIC> <AGING> <AGING2>
COLOR AMP <COLOR> <C OFF> AXIS <AXIS NTSC> <AXIS PAL>
YS1 SW <RGB SEL>
YM SW
YS2 SW
DYNAMIC COLOR <DYNAMIC C>
PICTURE AMP <PICTURE>
GAMMA AMP <GAMMA>
CLAMP BRIGHT CONT. <BRIGHT>
DRIVE AMP <R/G/B DRIVE>
CUTOFF CONT. <R/G/B CUTOFF>
R/G/B BLK <PON> <R/G/B ON>
24 B OUT
23 G OUT
22 R OUT
ACC DET.
CHROMA AMP
COLOR KILLER <<KILLER ID OFF>>
Y/C MIX RGB CLAMP
FILTER ALIGNMENT CAL. by fsc
CLAMP DC TRAN <DC TRAN>
BPF <C BPF>
ACC AMP
CHROMA
VPROT <<VNG>> VM AMP <VM LEV> (OFF YS/YM)
DAC SW
I²C BUS DECODER STATUS I/F
35 SDA
34 SCL
TV/C2 IN 43
C1 IN 2
CVBS2/Y2 IN 41
CVBS1/Y1 IN 4
COMB-C IN 7
COMB-Y IN 9
MON OUT 6
CHROMA SW
Y SW
MONITOR SW
VIDEO SW
<VIDEO SEL> <S SEL>
ATT
TRAP + EQ <TRAP OFF>
SHARPNESS DL SHARPNESS AMP <SHARPNESS> <SHP F0> <PRE/OVER>
Y
WIDE SAW FUNC. <ASPECT> <SCROLL> <UPPER VLIN> <LOWER VLIN> <V ZOOM> <JUMP SW>
VD SAW FUNC. <VON> <V SIZE> <V POSITION> <S CORRECTION> <V LINEARITY> <EHT COMP>
14 VD-
13 VD+
V SYNC SEP <VSS>
H SYNC SEP <HSS> <H MASK>
COUNT DOWN <CD MODE> <INTERLACE>
LINE COUNTER V TIM GEN. <JUMP SW> <REF P> <VBLKW>
VSAW GEN. VTIM
EW PARABOLA FUNC. <H SIZE> <PIN AMP> <UPPER CPIN> <TRAPEZIUM> <EW DC> <LOWER CPIN>
11 EW
AFC <AFC GAIN> <FH HIGH> <<HLOCK>> <<HCENT>>
HSAW GEN. <HOSC> (ZAP)
H TIM GEN. <H BLK> <LEFT HBLK> <RIGHT HBLK>
PHASE DET. <H POSITION> <AFC BOW> <AFC ANGLE> HPROT <<HNG>>
HD GEN. <HD W>
IREF
REG
20 AFC FIL
17 SCP
5 V TIM
18 HP/ PROTECT
19 HD
10 GND1
12 I REF
16 REG
33 Vcc1

AK BOARD SCHEMATIC DIAGRAM



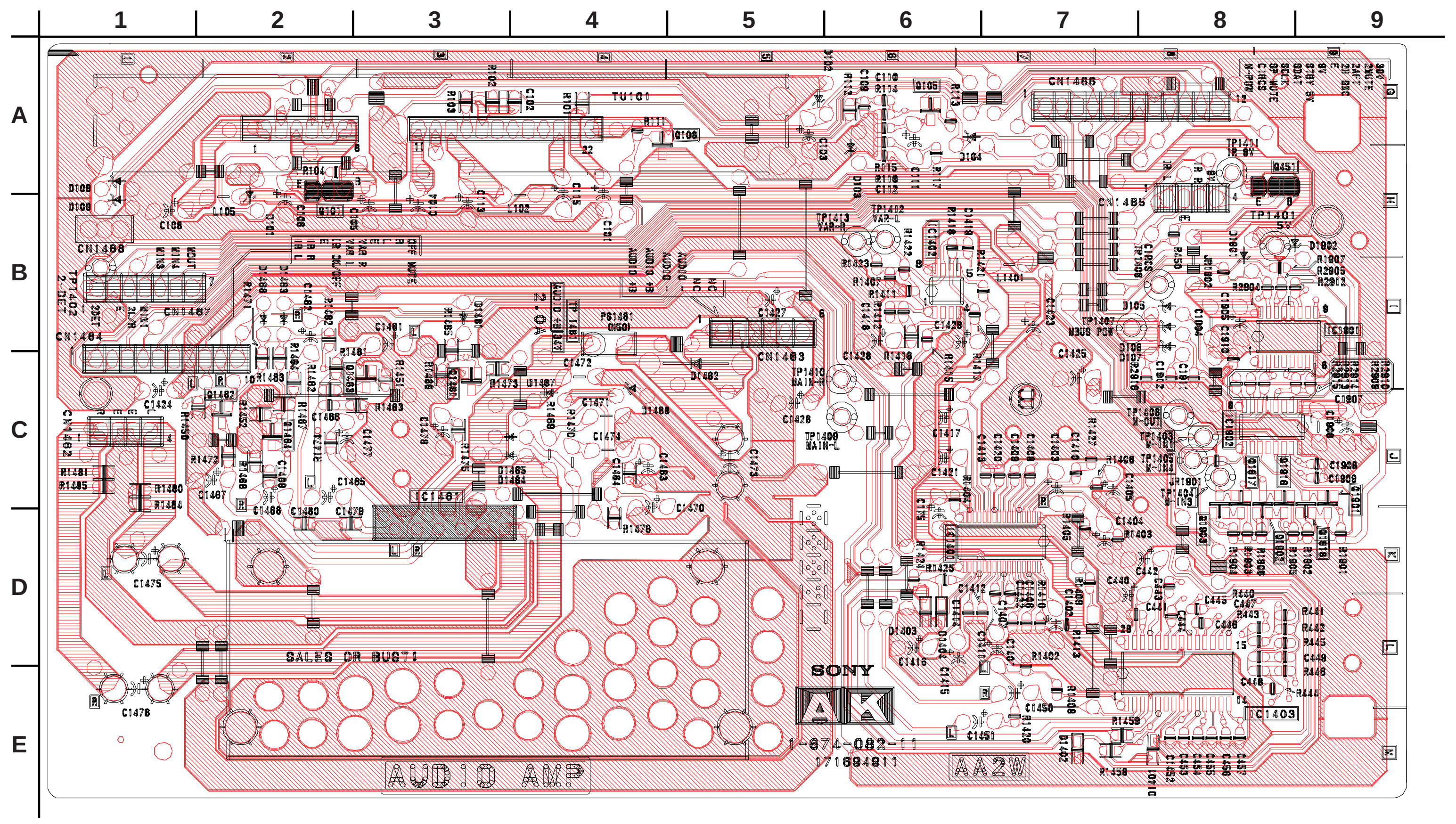
AK BOARD WAVEFORMS


① 1.5 Vp-p (H)
② 4.8 Vp-p (H)

AK BOARD (*) MARK LIST

REF. NO.	LOCATION	KV-34FV15K	KV-38FX250T
C101	D-4	1	1MF
C102	C-3	0.0022	0.0022MF
C104	D-5	10	10MF
C106	C-6	47	47MF
C108	D-6	1000	1000MF
C109	B-7	220p	220PF
C110	B-7	0.047	0.047MF
C111	C-7	1	1MF
C113	C-5	220	220MF
C115	A-5	1	1MF
C1904	C-12	0.01	0.01MF
C1905	C-12	10	10MF
C1906	B-11	0.01	0.01MF
C1907	B-10	10	10MF
C1908	B-12	0.001	0.001MF
C1909	B-12	0.001	0.001MF
C1910	D-10	0.001	0.001MF
C1911	D-10	0.001	0.001MF
C1912	D-10	0.001	0.001MF
CN1465	F-1	#	CONNECTOR
CN1467*	C-13	CONNECTOR	CONNECTOR
CN1468	B-13	(CONTACT)	(CONTACT)
D101	C-6	RD5.6ESB2	RD5.6ESB2
D103	C-8	1SS133T-77	1SS133T-77
D104	B-8	1SS133T-77	1SS133T-77
D105	E-11	1SS133T-77	1SS133T-77
D106	D-11	1SS133T-77	1SS133T-77
D107	D-11	1SS133T-77	1SS133T-77
D108	D-7	RD10ESB2	RD10ESB2
D109	D-7	RD10ESB2	RD10ESB2
IC1901	D-12	CXA1315M	CXA1315M
IC1902	B-11	NJM2145M-TE2	NJM2145M-TE2
L102	C-5	10UH	10UH
L105	C-6	100UH	100UH
Q101	C-6	2SC2785-HFE	2SC2785-HFE
Q105	B-7	2SA1162-G	2SA1162-G
Q106	B-6	2SD601A-Q	2SD601A-Q
Q1902	B-9	2SA1162-G	2SA1162-G
Q1903	B-9	2SA1162-G	2SA1162-G
Q1918	B-10	2SA1162-G	2SA1162-G
Q451	F-2	#	2SB734-34
R101	D-4	4.7K	4.7K
R102	C-3	27K	27K
R103	C-5	39K	39K
R104	C-6	1K	1K
R112	B-7	2.2K	2.2K
R113	B-7	100K	100K
R114	B-7	1M	1M
R115	C-7	10K	10K
R116	C-8	10K	10K
R117	C-8	4.7K	4.7K
R118	A-7	470	470
R119	A-7	560	560
R450	F-2	#	10K
R1486	H-10	220	220
R1487	H-10	220	220
R1902	B-10	10K	10K
R1904	B-9	10K	10K
R1906	B-9	10K	10K
R1907	B-11	220	220
R2904	D-12	220	220
R2905	D-12	220	220
R2909	C-11	10K	10K
R2910	C-11	10K	10K
R2912	C-12	4.7K	4.7K
R2913	C-11	10K	10K
R2914	D-11	10K	10K
R2915	E-12	10K	10K
R2916	E-10	10K	10K
TU101	D-5	8-598-430-00	8-598-430-00

AK [AUDIO AMP, TRUSURROUND, 2ND TUNER, S-LINK]



AK BOARD LOCATOR LIST

DIODE	
D101	A-2
D103	A-6
D104	A-6
D105	B-8
D106	B-8
D107	C-8
D108	A-1
D109	B-1
D1461	B-3
D1463	B-2
D1466	B-2
D1467	C-4
D1468	C-4

IC	
IC1401	D-6
IC1402	B-6
IC1403	E-8
IC1461	D-3
IC1901	B-8
IC1902	C-8

PHOTOSENSOR	
PS1461	B-4

TRANSISTOR	
Q101	A-2
Q105	A-6
Q106	A-4
Q451	F-2
Q1461	C-3
Q1462	C-2
Q1463	C-2
Q1464	C-2
Q1902	D-8
Q1903	D-9
Q1918	D-9

AK BOARD TRANSISTOR VOLTAGE LIST

	B	C	E
Q101	5.7	9.3	5.1
Q105	5.1	1.1	5.0
Q106	5.6	9.3	4.9
Q451	8.9	0.4	9.3
Q1461	0	4.2	GND
Q1462	0	11.6	GND
Q1463	0	0	GND
Q1464	0	0	GND
Q1902	5.0	0.7	0
Q1903	5.0	0.7	0
Q1918	5.0	0.7	0

All voltages are in V

AK BOARD IC VOLTAGE LIST

IC1401	
pin	volt
1	GND
2	0.7
3	1.2
4	4.5
5	4.5
6	4.5
7	4.5
8	4.5
9	4.5
10	4.5
11	0
12	4.5
13	1.0
14	1.9
15	9.1
16	9.1
17	4.7
18	4.7
19	1.9
20	1.0
21	4.5
22	4.5
23	4.5
24	4.5
25	4.5
26	4.5
27	4.5
28	4.5
29	4.5
30	4.5
31	2.9
32	4.5

IC1402	
pin	volt
1	4.5
2	4.5
3	4.5
4	GND
5	4.5
6	4.5
7	4.5
8	9.1

IC1403	
pin	volt
1	3.9
2	4.5
3	4.5
4	GND
5	4.7
6	NC
7	4.7
8	GND
9	4.5
10	4.5
11	4.5
12	4.5
13	4.5
14	4.5
15	4.5
16	4.5
17	4.5
18	4.5
19	4.5
20	4.5
21	9.1
22	4.5
23	4.5
24	4.5
25	4.5
26	4.5
27	4.5
28	3.9

IC1461	
1	1.5
2	0
3	NC
4	0
5	1.5
6	11.6
7	16.0
8	5.1
9	34.5
10	0
11	4.2
12	15.7

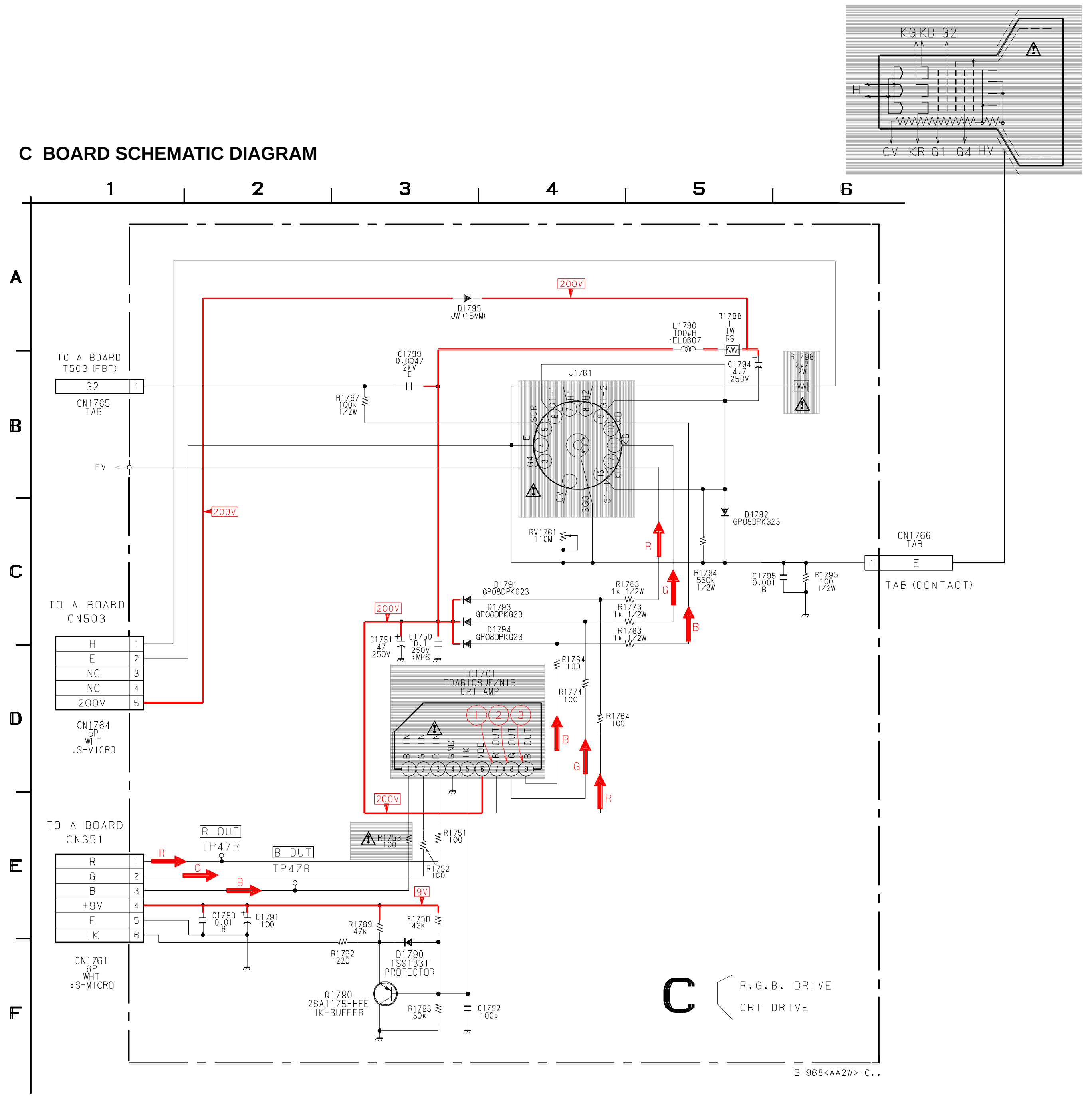
IC1901	
1	0
2	0.4
3	NC
4	NC
5	NC
6	NC
7	0.4
8	GND
9	0
10	NC
11	9.3
12	0
13	0
14	4.7
15	4.7
16	9.3

IC1902	
1	5.0
2	3.9
3	5.0
4	0.1
5	GND
6	0
7	0
8	0
9	0.7
10	0.7
11	0.7
12	NC
13	0
14	0.4
15	0.4
16	GND

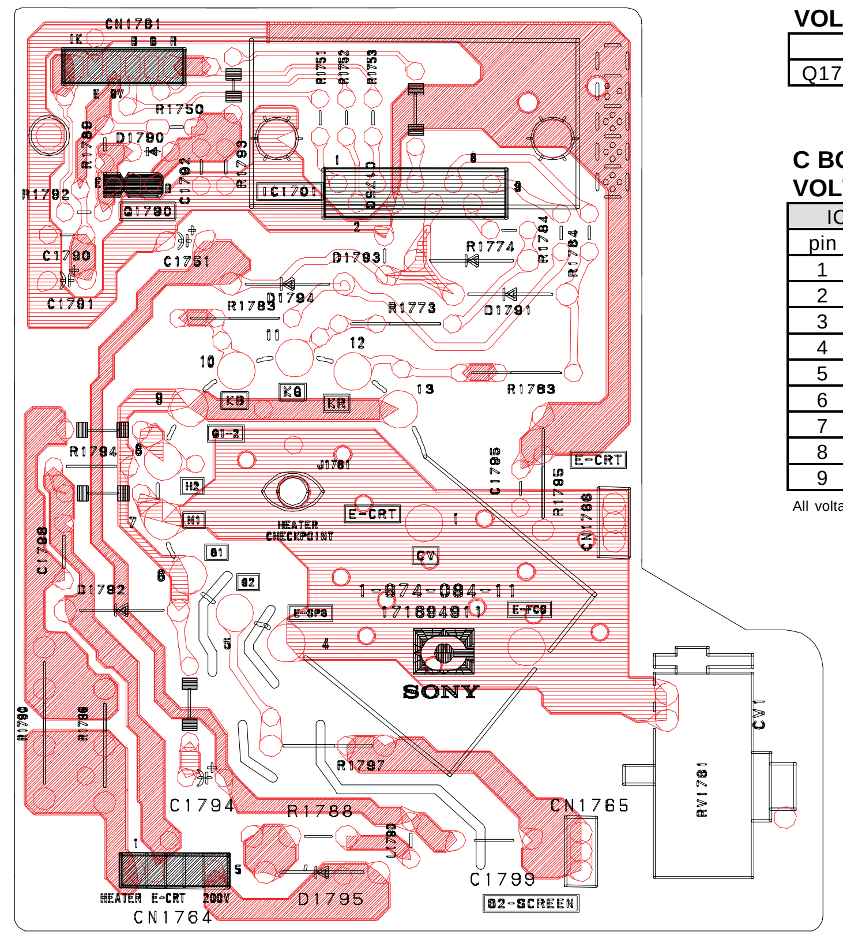
All voltages are in V

Schematic diagrams
⬅ A board
AK board ➡

C BOARD SCHEMATIC DIAGRAM


KG KB G2
CV KR G1 G4 HV
TO A BOARD T503 (FBT)
TO A BOARD CN503
TO A BOARD CN351
TAB (CONTACT)
IC1701 TDA6108JF/N1B CRT AMP
C
R.G.B. DRIVE
CRT DRIVE

C [RGB DRIVE, CRT DRIVE]


SONY
1-674-084-11
HEATER CHECKPOINT
C-CRT
G2-SCREEN
CN1764
CN1765

C BOARD TRANSISTOR VOLTAGE LIST

	B	C	E
Q1790	4.8	GND	4.4

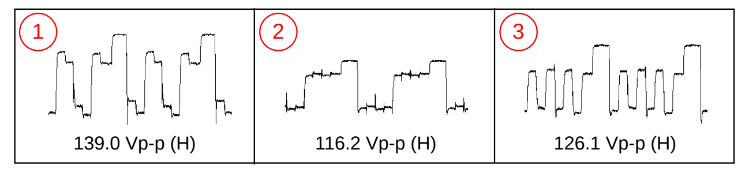
All voltages are in V

C BOARD IC VOLTAGE LIST

IC1701	
pin	volt
1	1.8
2	1.9
3	2.0
4	GND
5	4.8
6	208.0
7	149.2
8	150.3
9	153.9

All voltages are in V

C BOARD WAVEFORMS



G BOARD IC VOLTAGE LIST

IC601		IC643	
pin	volt	pin	volt
B-1	-1.1	1	134.0
B-2	151.4	2	NC
C-1	152.8	3	2.4
C-2	298.6	4	9.3
E-1	GND	5	GND
E-2	152.1	**IC650**	
IC622		pin	volt
pin	volt	IN	13.3
IN	6.9	OUT	11.8
OUT	5.0	GND	GND
GND	GND	**IC651**	
IC641		pin	volt
pin	volt	IN	11.7
IN	11.5	OUT	5.0
OUT	9.5	GND	GND
GND	GND		

All voltages are in V

G BOARD TRANSISTOR VOLTAGE LIST

	B	C	E
Q622	0.4	1.7	GND
Q623	0.6	0	GND
Q624	12.6	0	12.2
Q644	0	11.8	GND
Q645	12.2	GND	9.1
Q646	6.2	6.9	6.9
Q647	0	12.2	GND
Q648	0.7	0	GND
Q649	11.5	0	11.8
Q650	0	2.2	GND
Q651	13.5	0	135.5
Q652	3.5	0	3.5
Q653	0	3.5	GND

All voltages are in V

G BOARD TRANSISTOR VOLTAGE LIST

	D	G	S
Q621	147.3	1.6	0

All voltages are in V

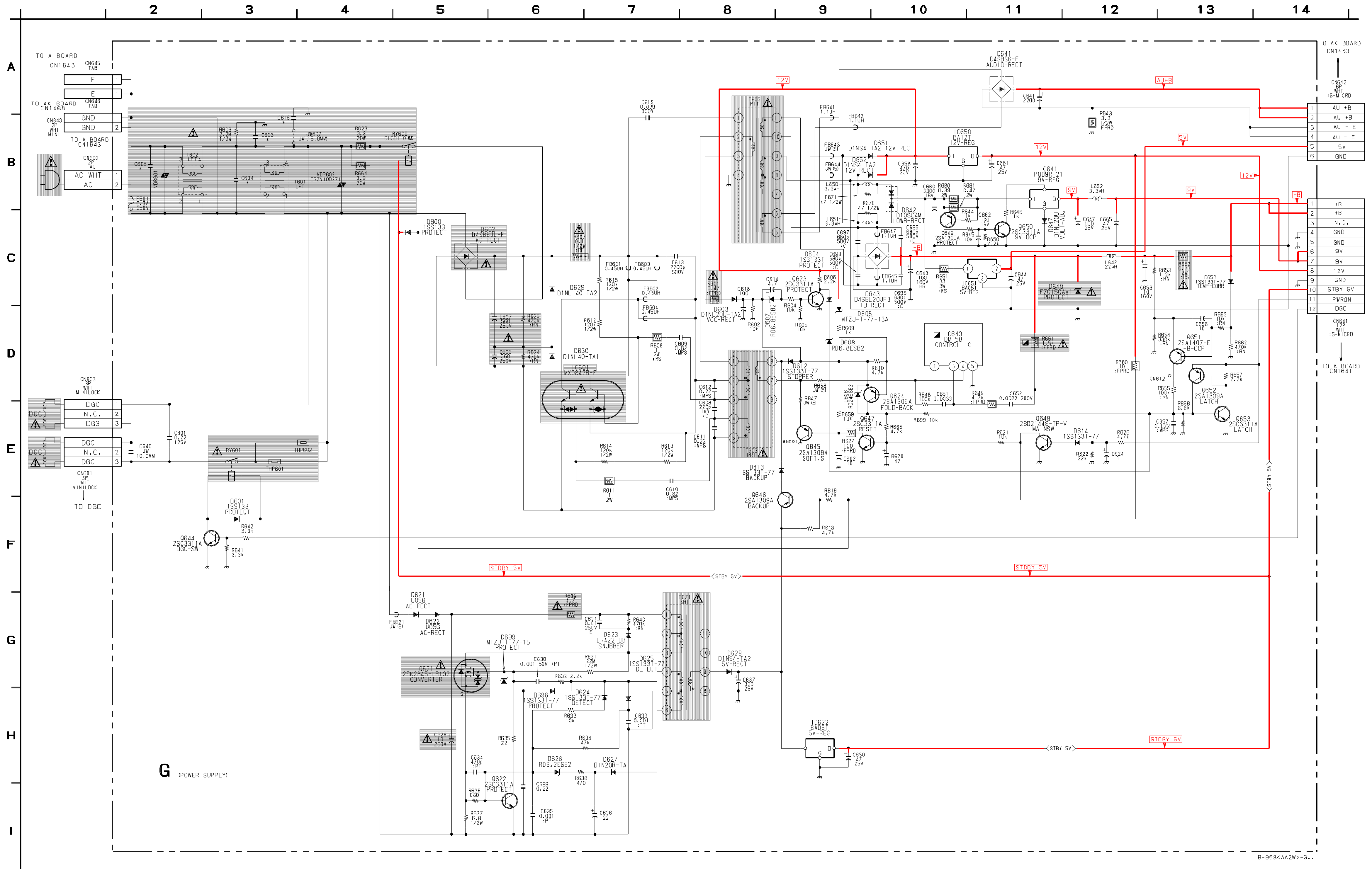
G BOARD LOCATOR LIST

DIODE		IC	
D600	A-5	IC601	D-5
D601	A-8	IC622	A-8
D602	C-3	IC641	D-10
D603	B-7	IC643	B-8
D604	E-7	IC650	B-10
D605	A-8	IC651	B-10
D606	A-9	**TRANSISTOR**	
D607	D-7	Q621	B-6
D608	E-7	Q622	B-5
D612	B-8	Q623	D-7
D613	A-7	Q624	A-9
D614	B-11	Q644	B-11
D621	B-5	Q645	B-8
D622	B-5	Q646	A-8
D623	B-6	Q647	A-8
D624	A-6	Q648	B-11
D625	A-6	Q649	C-10
D626	A-5	Q650	C-10
D627	A-6	Q651	D-7
D628	A-7	Q652	E-7
D629	E-3	Q653	E-7
D630	D-4		
D641	B-9		
D642	C-9		
D643	D-8		
D647	D-10		
D648	D-9		
D651	C-9		
D652	B-8		
D653	E-8		
D698	B-6		
D699	B-6		

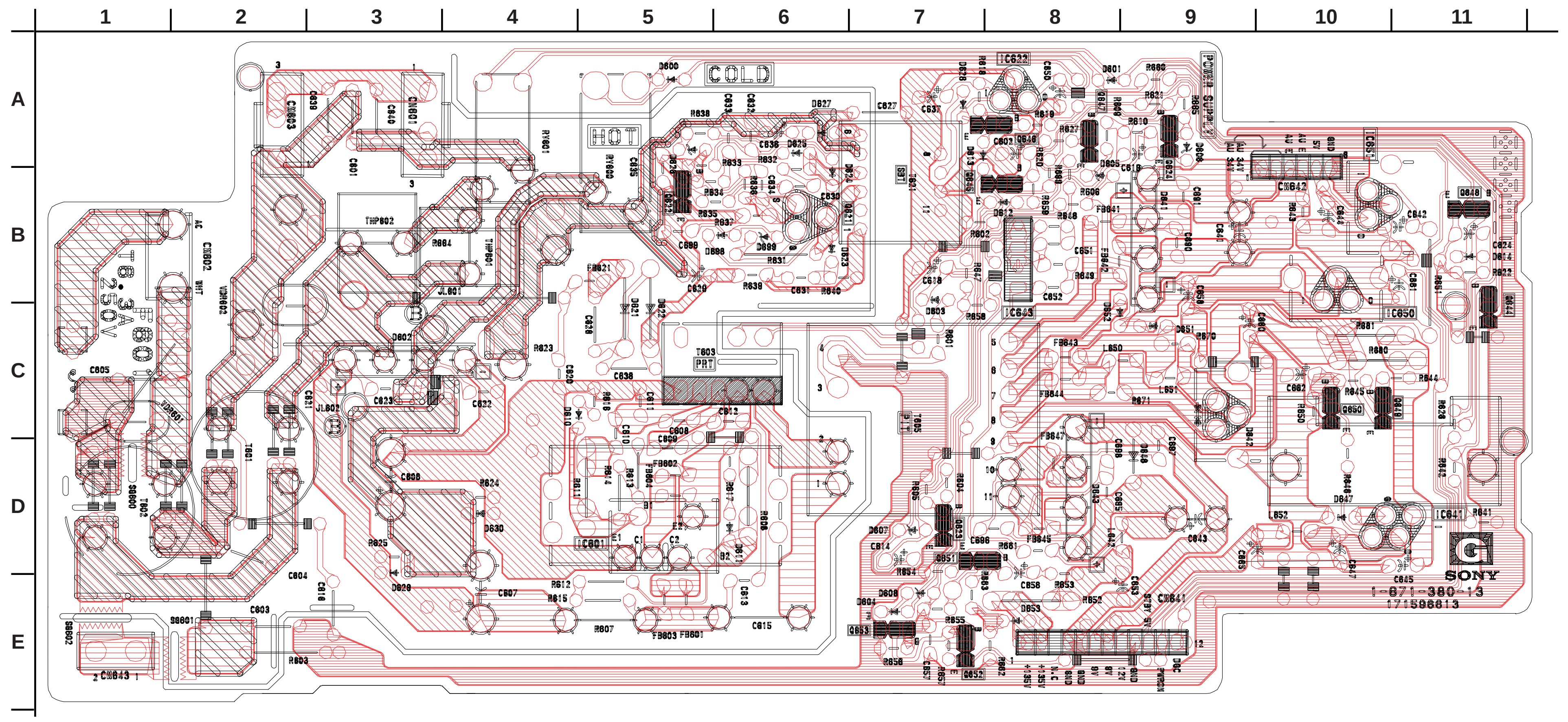
G BOARD (*) MARK LIST

REF. NO.	LOCATION	KV-36XBR250	KV-38FX250T
C603	B-3	1000p	2200p
C604	B-3	0.22	0.47
C605	B-2	0.22	0.47
C616	B-4	1000p	2200p

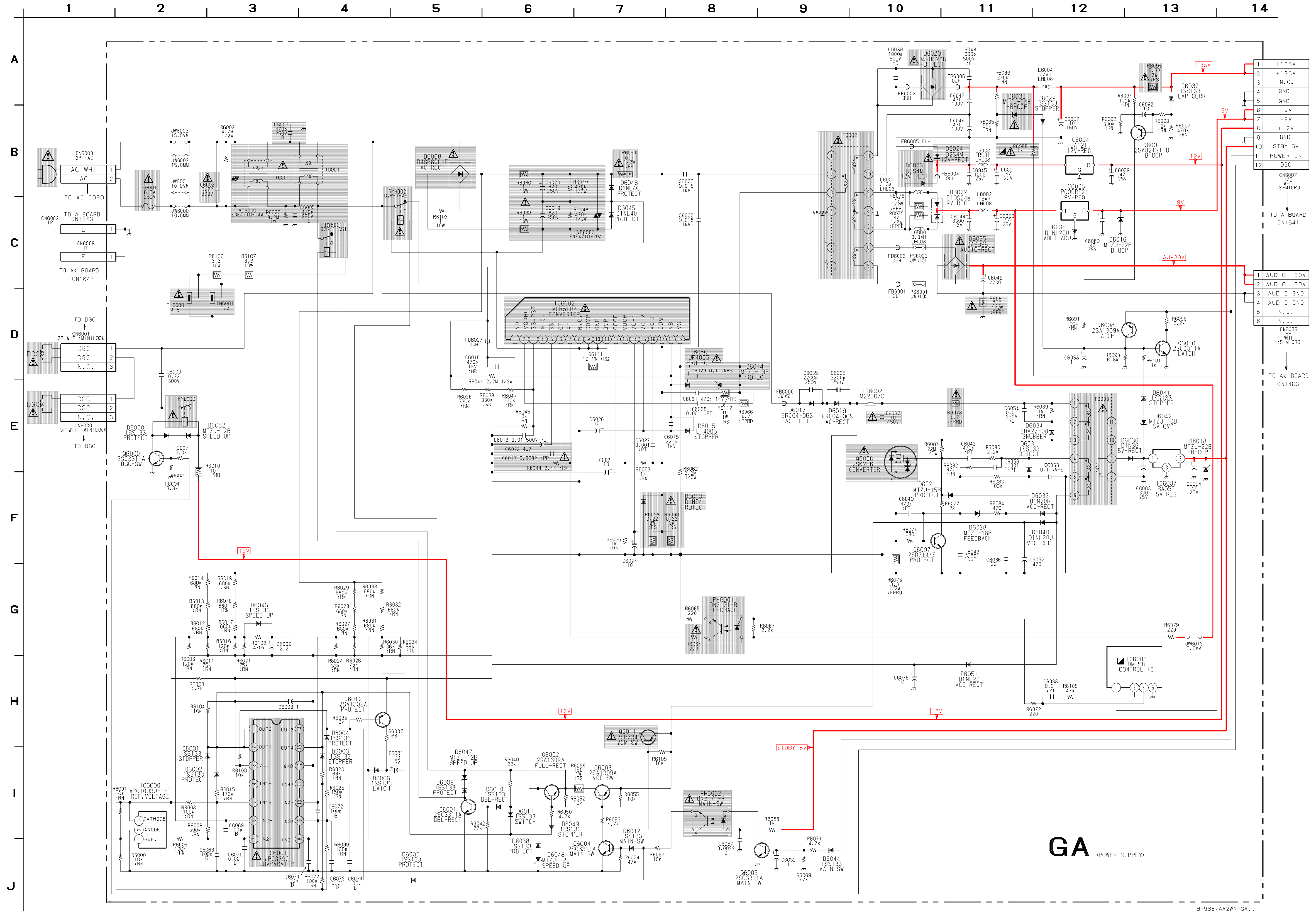
G BOARD SCHEMATIC DIAGRAM


TO A BOARD CN1643
TO AK BOARD CN1463
TO A BOARD CN1641
TO DGC
G
(POWER SUPPLY)

G [AC-RECT, DC-DC CONV., LOW B REG]


COLD
HOT
SONY
1-671-380-13

GA BOARD SCHEMATIC DIAGRAM


GA POWER SUPPLY
B-968<AA2W>-GA..

GA BOARD IC VOLTAGE LIST

IC6000 pin	IC6000 volt
REF	2.0
ANODE	GND
CATHODE	5.0

IC6001 pin	IC6001 volt
1	17.9
2	17.9
3	17.9
4	3.2
5	5.0
6	3.3
7	5.0
8	3.2
9	5.0
10	3.3
11	4.8
12	GND
13	17.9
14	17.9

IC6002 pin	IC6002 volt
1	303.5
2	158.7
3	3.9
4	NC
5	4.5
6	2.1
7	3.7
8	GND
9	GND
10	GND
11	GND
12	0
13	0
14	17.7
15	10.9
16	4.8
17	0
18	164.3
19	154.2

IC6003 pin	IC6003 volt
1	133.8
2	NC
3	2.4
4	9.4
5	GND

IC6004 pin	IC6004 volt
IN	13.1
OUT	11.8
GND	GND

IC6005 pin	IC6005 volt
IN	11.1
OUT	9.6
GND	GND

IC6007 pin	IC6007 volt
1	7.1
2	5.0
3	GND

All voltages are in V

GA BOARD TRANSISTOR VOLTAGE LIST

	B	C	E
Q6000	0	11.8	GND
Q6001	0.7	0.1	GND
Q6002	11.9	0	11.9
Q6003	16.9	17.6	17.7
Q6004	0.7	0	GND
Q6005	0.5	-0.1	GND
Q6007	0.3	1.5	GND
Q6008	3.5	-0.1	3.5
Q6009	134.0	-0.1	134.5
Q6010	-0.1	3.5	GND
Q6011	17.1	17.7	17.7
Q6012	18.0	0.5	17.9

All voltages are in V

GA BOARD TRANSISTOR VOLTAGE LIST

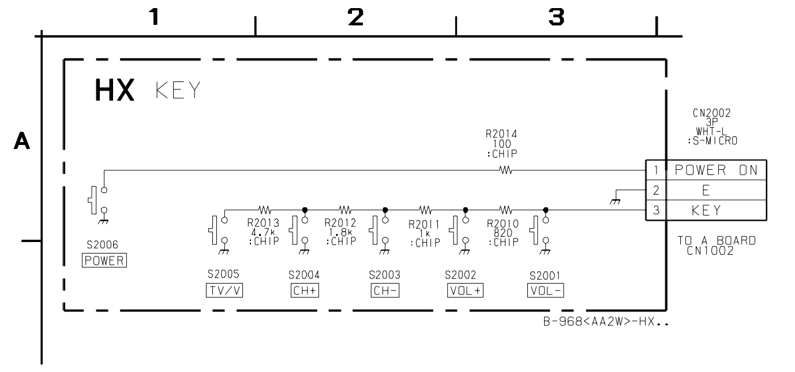
	D	G	S
Q6006	150.0	1.5	GND

All voltages are in V

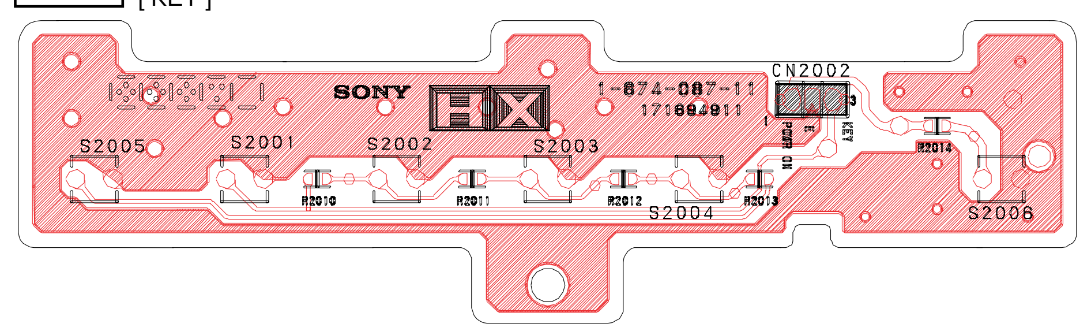
GA BOARD LOCATOR LIST

DIODE	
D6000	I-5
D6001	C-4
D6002	C-4
D6003	B-4
D6004	B-4
D6005	C-5
D6006	C-5
D6008	B-7
D6009	H-2
D6010	D-4
D6011	P-4
D6012	E-3
D6013	D-3
D6014	D-3
D6015	C-2
D6016	I-2
D6017	H-5
D6018	J-5
D6019	H-5
D6020	G-2
D6021	I-6
D6022	G-3
D6023	G-3
D6024	G-3
D6025	G-4
D6028	H-2
D6029	H-2
D6030	G-2
D6031	I-6
D6032	J-6
D6034	H-5
D6035	H-2
D6036	I-5
D6037	H-1
D6038	E-4
D6040	J-6
D6041	J-4
D6042	J-4
D6043	C-4
D6044	G-4
D6045	B-4
D6046	B-5
D6047	C-5
D6048	E-4
D6049	E-4
D6050	C-3
D6051	J-6
D6052	I-4
IC	
IC6000	C-4
IC6001	B-3
IC6002	D-1
IC6003	F-1
IC6004	I-3
IC6005	H-2
IC6007	J-5
PHOTOCOUPLER	
PH6001	E-1
PH6002	F-3
TRANSISTOR	
Q6000	I-5
Q6001	D-4
Q6002	E-4
Q6003	H-3
Q6004	E-3
Q6005	F-3
Q6006	H-6
Q6007	H-6
Q6008	H-3
Q6009	H-2
Q6010	H-2
Q6011	D-3
Q6012	C-4

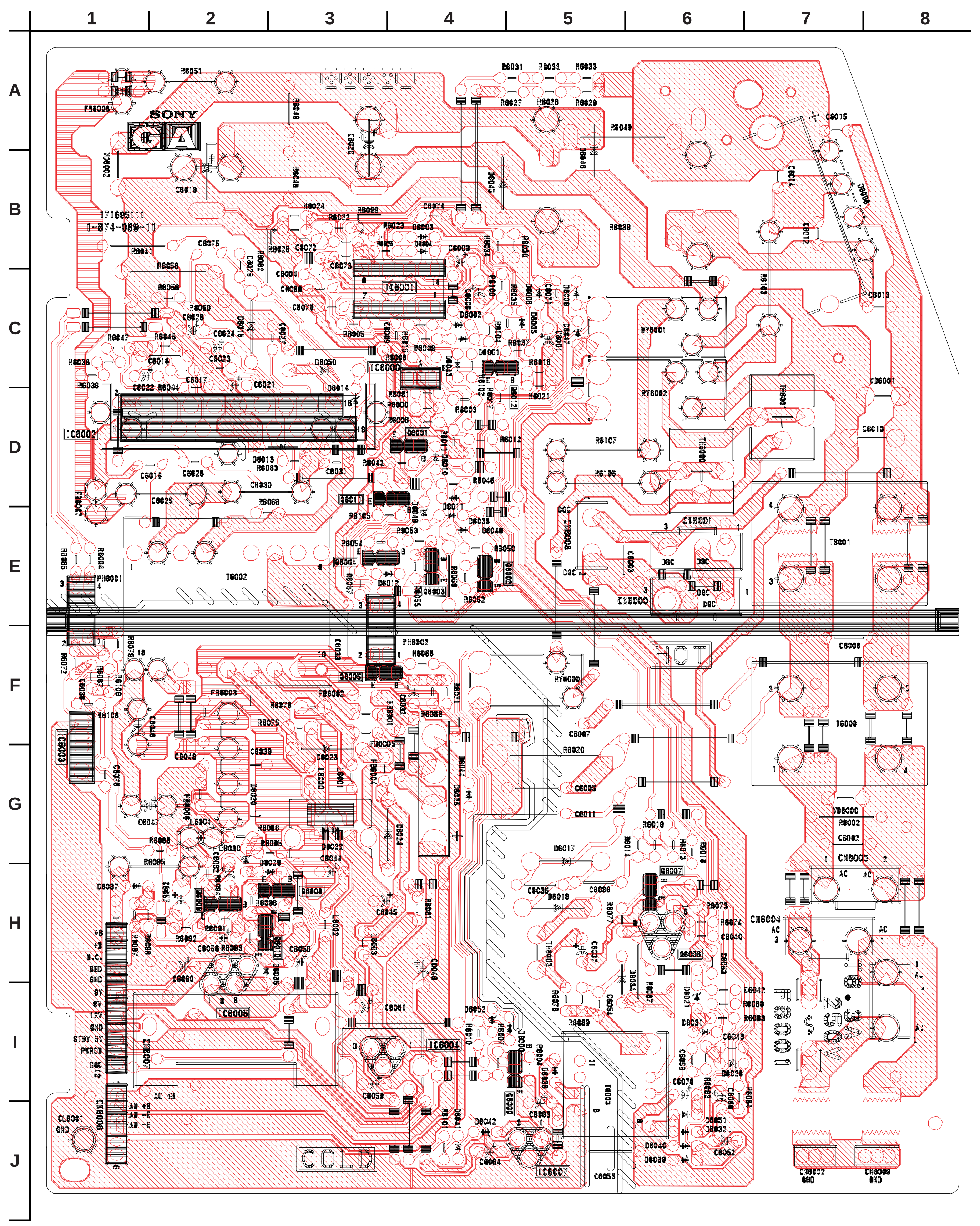
HX BOARD SCHEMATIC DIAGRAM


HX KEY
S2006 POWER
POWER ON
TO A BOARD
B-968<AA2W>-HX..

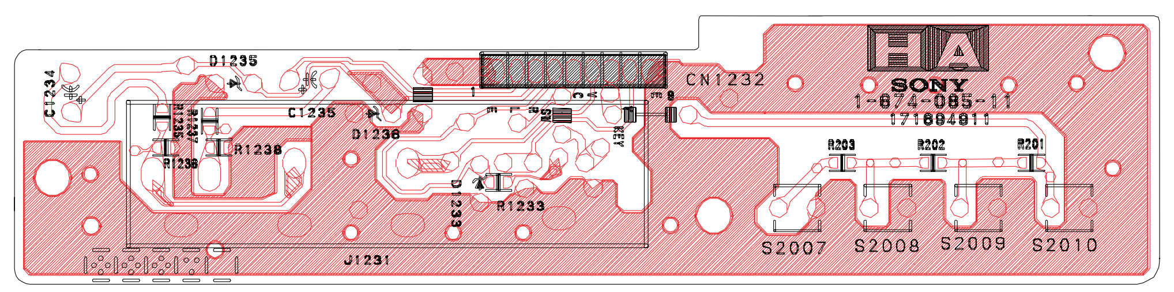
HX [KEY]


SONY
HX
1-674-087-11
S2005
S2001
S2002
S2003
S2004
S2006
CN2002

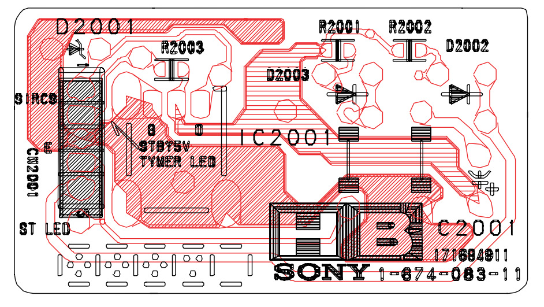
GA [POWER SUPPLY]


SONY
GA
COLD

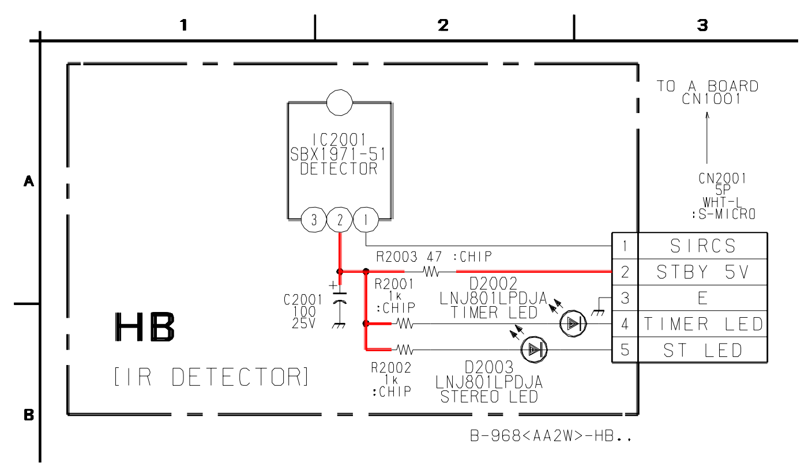
HA [FRONT A/V - MENU KEY]


HA
SONY
1-674-085-11
CN1232
J1231
S2007
S2008
S2009
S2010

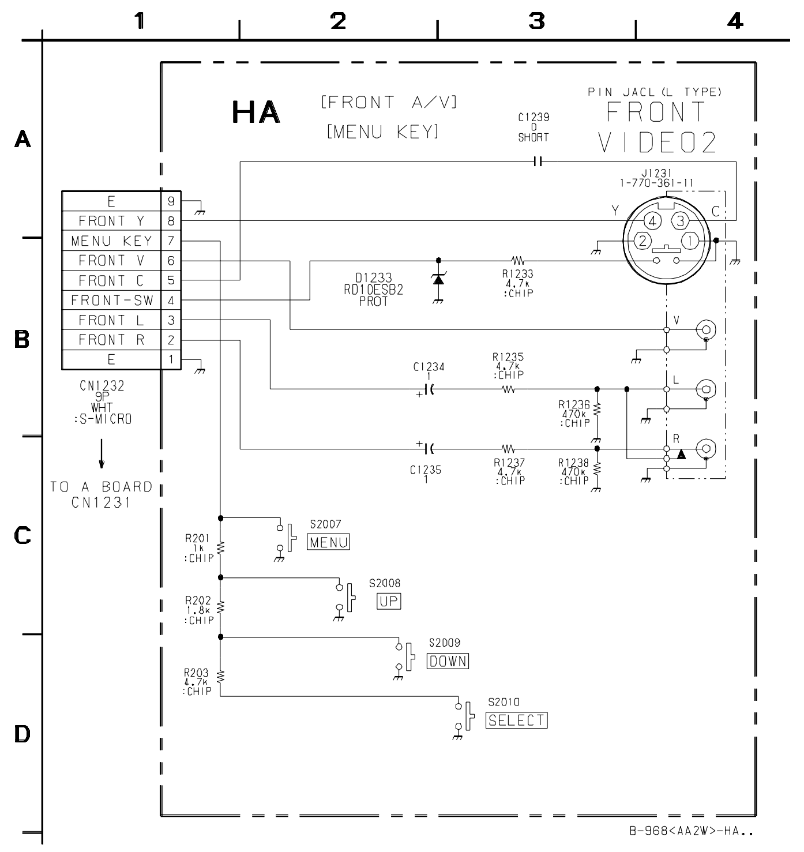
HB [IR DETECTOR]


HB
SONY 1-674-083-11
C2001
ST LED
TIMER LED

HB BOARD SCHEMATIC DIAGRAM


HB
[IR DETECTOR]
TO A BOARD
SIRCS
STBY 5V
TIMER LED
ST LED
B-968<AA2W>-HB..

HA BOARD SCHEMATIC DIAGRAM


HA
[FRONT A/V]
[MENU KEY]
FRONT VIDEO2
TO A BOARD
B-968<AA2W>-HA..

T BOARD LOCATOR LIST

DIODE	
D401	A-1
D402	B-3
D403	B-3
D404	C-4
D405	C-3
D406	C-2
D407	C-1
D408	C-4
D409	C-3
D410	C-2
D411	C-1
IC	
IC401	A-3
TRANSISTOR	
Q401	B-2
Q402	A-2
Q403	A-3
Q404	B-2
Q405	A-1
Q406	B-1
Q407	B-1
Q408	A-1
Q409	A-1
Q410	B-2
Q411	B-1

T BOARD TRANSISTOR VOLTAGE LIST

	B	C	E
Q401	0.9	3.2	0.2
Q402	0.9	3.2	0.2
Q403	7.8	8.8	8.5
Q404	0.6	0.1	1.2
Q405	0.6	0.1	1.2
Q406	1.2	2.7	0.6
Q407	1.2	2.7	0.6
Q408	1.2	2.5	0.6
Q409	1.2	2.5	0.6
Q410	0.6	0.1	1.2
Q411	0.6	0.1	1.2

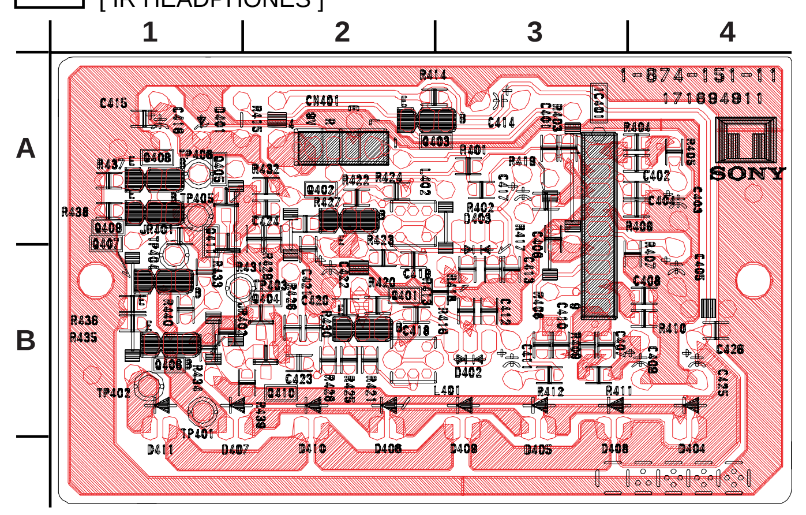
All voltages are in V

T BOARD IC VOLTAGE LIST

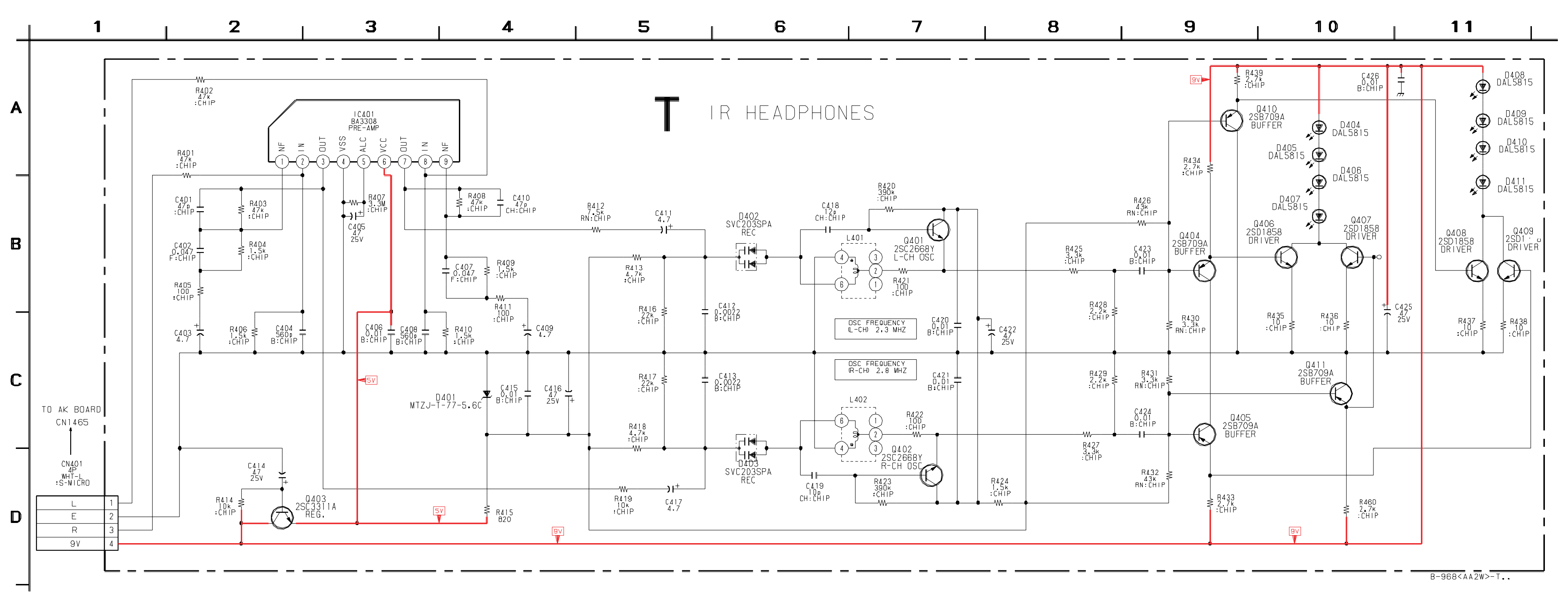
IC401 pin	IC401 volt
1	1.9
2	0.1
3	1.9
4	0.1
5	0.2
6	7.8
7	1.9
8	0.1
9	1.9

All voltages are in V

T [IR HEADPHONES]


T
SONY
1-674-151-11
CN401
IC401

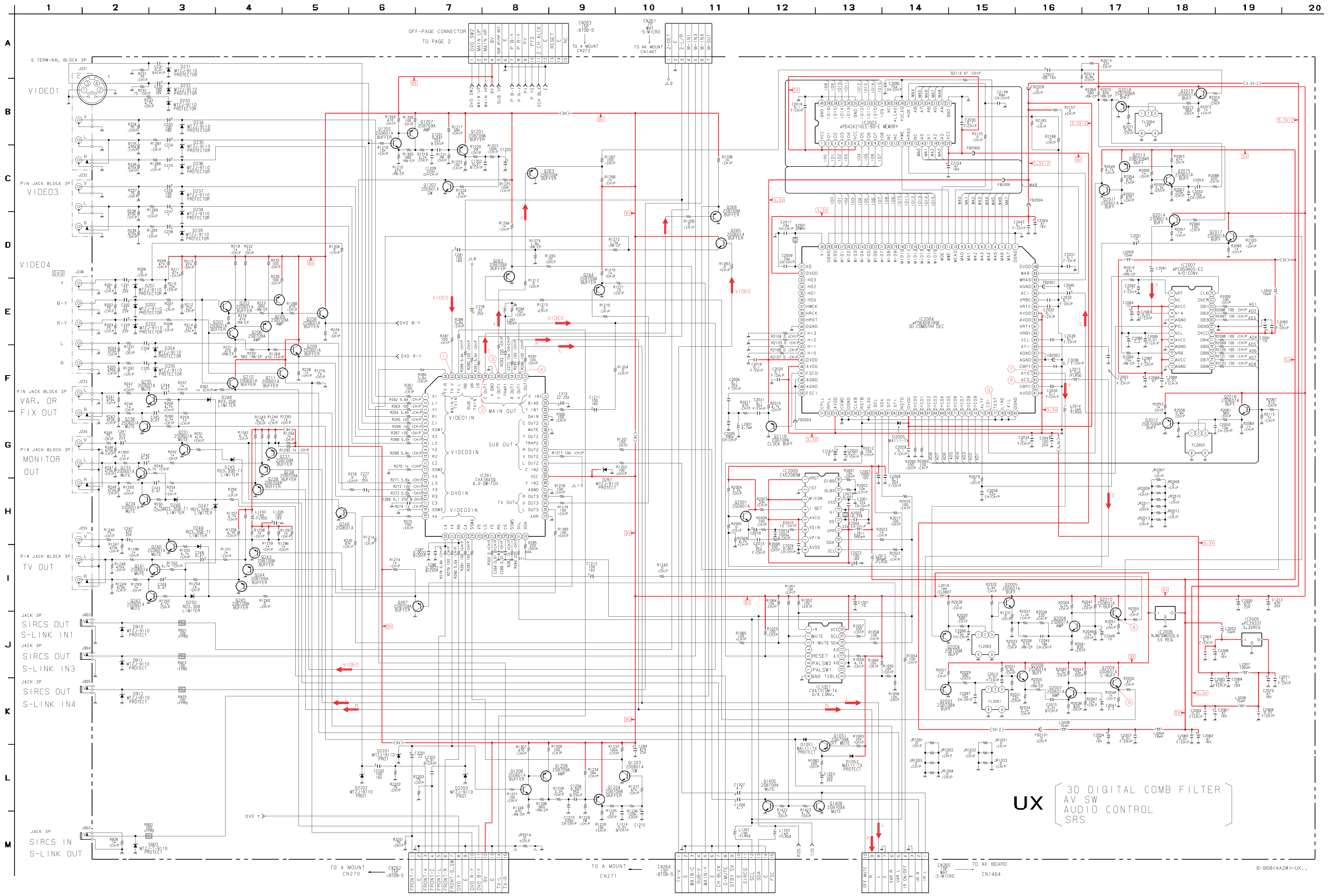
T BOARD SCHEMATIC DIAGRAM


T
IR HEADPHONES
TO AK BOARD

Schematic diagrams

← C G boards
GA HA HB HX T boards →

UX MAIN BOARD SCHEMATIC DIAGRAM


UX
3D DIGITAL COMB FILTER
AV SW
AUDIO CONTROL
SRS
OFF-PAGE CONNECTOR
TO PAGE 2
TO A MOUNT CN270
TO A MOUNT CN271
TO AK BOARD CN1464
S TERMINAL BLOCK 3P
VIDEO1
PIN JACK BLOCK 3P
VIDEO3
VIDEO4
PIN JACK BLOCK 3P
VAR. OR FIX OUT
PIN JACK BLOCK 3P
MONITOR OUT
PIN JACK BLOCK 3P
TV OUT
JACK 3P
SIRCS OUT
S-LINK IN1
JACK 3P
SIRCS OUT
S-LINK IN3
JACK 3P
SIRCS OUT
S-LINK IN4
JACK 3P
SIRCS IN
S-LINK OUT
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
A
B
C
D
E
F
G
H
I
J
K
L
M

UX (MAIN) BOARD IC VOLTAGE LIST

IC261 pin	volt
1	4.5
2	4.5
3	4.5
4	4.5
5	4.5
6	4.5
7	4.5
8	4.5
9	NC
10	4.5
11	NC
12	0
13	NC
14	4.5
15	4.5
16	4.5
17	4.5
18	0
19	4.5
20	4.5
21	4.5
22	4.5
23	4.5
24	4.5
25	NC
26	NC
27	4.5
28	4.5
29	4.5
30	0
31	4.7
32	4.7
33	GND
34	4.6
35	4.2
36	4.6
37	GND
38	NC
39	8.9
40	NC
41	4.6
42	4.4
43	4.4
44	NC
45	NC
46	GND
47	NC
48	GND
49	4.5
50	4.5
51	NC
52	4.6
53	4.4
54	4.6
55	4.4
56	4.4
57	GND
58	4.4
59	4.5
60	NC
61	4.5
62	4.5
63	4.5
64	4.5

IC1051 pin	volt
1	8.9
2	8.9
3	0.4
4	NC
5	6.1
6	NC
7	NC
8	GND
9	6.0
10	NC
11	GND
12	8.9
13	GND
14	4.7
15	4.7
16	8.9

IC2003 pin	volt
1	5.0
2	1.7
3	1.7
4	1.7
5	1.6
6	5.0
7	1.4
8	1.6
9	1.7
10	1.0
11	NC
12	NC
13	2.9
14	0.5
15	NC
16	1.5
17	1.5
18	1.5
19	1.5
20	5.0
21	GND
22	1.7
23	1.5
24	1.6
25	1.6
26	1.6
27	2.5
28	1.0
29	1.0
30	NC
31	1.4
32	1.5
33	1.9
34	1.6
35	GND
36	1.7
37	1.7
38	1.7
39	1.7
40	GND

IC2004 pin	volt
1	GND
2	1.5
3	1.5
4	1.5
5	1.5
6	1.5
7	1.5
8	1.5
9	1.5
10	1.0
11	2.8
12	2.5
13	1.3
14	1.4
15	1.8
16	1.6
17	1.6
18	1.7
19	1.7
20	1.7
21	1.0
22	1.6
23	1.5
24	1.5
25	1.5
26	1.7
27	1.7
28	1.7
29	GND
30	1.5
31	1.5
32	3.3
33	NC
34	NC
35	NC
36	NC
37	NC
38	NC
39	NC
40	GND
41	0
42	0
43	0
44	0
45	3.3
46	3.3
47	1.9
48	GND
49	GND
50	1.5
51	NC
52	NC
53	3.3
54	GND
55	GND
56	NC
57	4.0
58	GND
59	4.7
60	4.7
61	0.1
62	NC
63	NC
64	3.3
65	0
66	0
67	1.9
68	1.9
69	1.9
70	1.8
71	1.6
72	2.0
73	1.7
74	1.5
75	1.7
76	4.4
77	GND
78	GND
79	GND
80	GND
81	3.3
82	1.0
83	1.7
84	1.7
85	1.0
86	GND
87	GND
88	2.2
89	0
90	NC
91	NC
92	3.3
93	3.3
94	3.3
95	3.3
96	0
97	0
98	0.5
99	1.7
100	3.3

IC2005 pin	volt
IN	5.0
OUT	3.3
GND	GND

IC2006 pin	volt
IN	8.9
OUT	5.0
GND	GND

IC2007 pin	volt
1	3.3
2	NC
3	5.0
4	2.7
5	GND
6	0.1
7	2.5
8	5.0
9	GND
10	2.3
11	5.0
12	GND
13	2.0
14	2.0
15	2.1
16	2.0
17	1.7
18	5.0
19	GND
20	2.0
21	1.7
22	1.5
23	NC
24	1.7

IC2009 pin	volt
1	4.8
2	GND
3	4.8
4	1.4
5	4.8
6	1.8
7	1.6
8	GND
9	4.7
10	4.7
11	4.8
12	2.5
13	2.4
14	GND
15	0
16	4.8

All voltages are in V

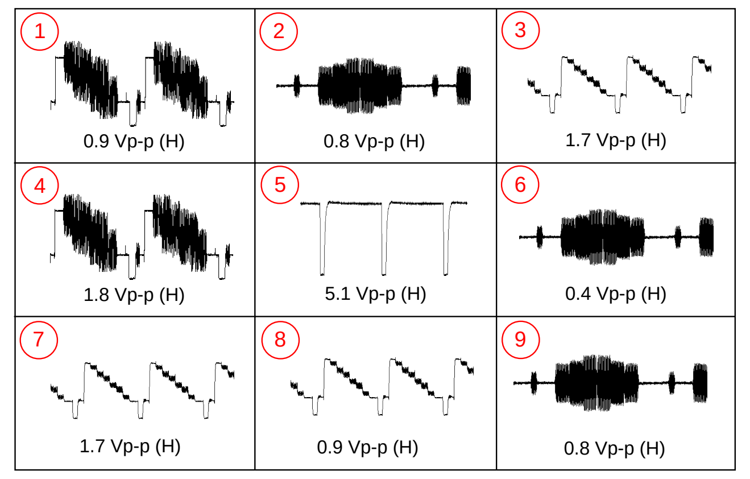
UX (MAIN) BOARD TRANSISTOR VOLTAGE LIST

	B	C	E
Q202	2.6	7.9	2.0
Q203	2.6	7.9	2.0
Q205	7.9	3.9	8.5
Q206	7.9	3.9	8.6
Q208	3.9	8.9	3.2
Q209	3.9	8.9	3.2
Q210	2.6	8.9	2.0
Q211	2.6	8.9	2.0
Q212	4.4	8.9	0
Q231	0	5.1	GND
Q233	0.2	0	GND
Q234	0.2	0	GND
Q235	0.1	0	GND
Q236	0.1	0	GND
Q237	4.4	GND	5.1
Q238	4.6	GND	5.2
Q239	4.6	GND	5.2
Q240	0.7	0.2	GND
Q241	0.6	0	GND
Q242	0.6	0	GND
Q243	4.1	GND	0.2
Q244	4.6	GND	5.2
Q245	4.6	GND	5.2
Q246	0.4	5.1	GND
Q262	3.8	GND	4.5
Q263	4.5	GND	5.1
Q264	4.2	GND	4.8
Q265	4.7	8.9	4.1
Q267	3.1	GND	3.7
Q268	4.5	GND	5.1

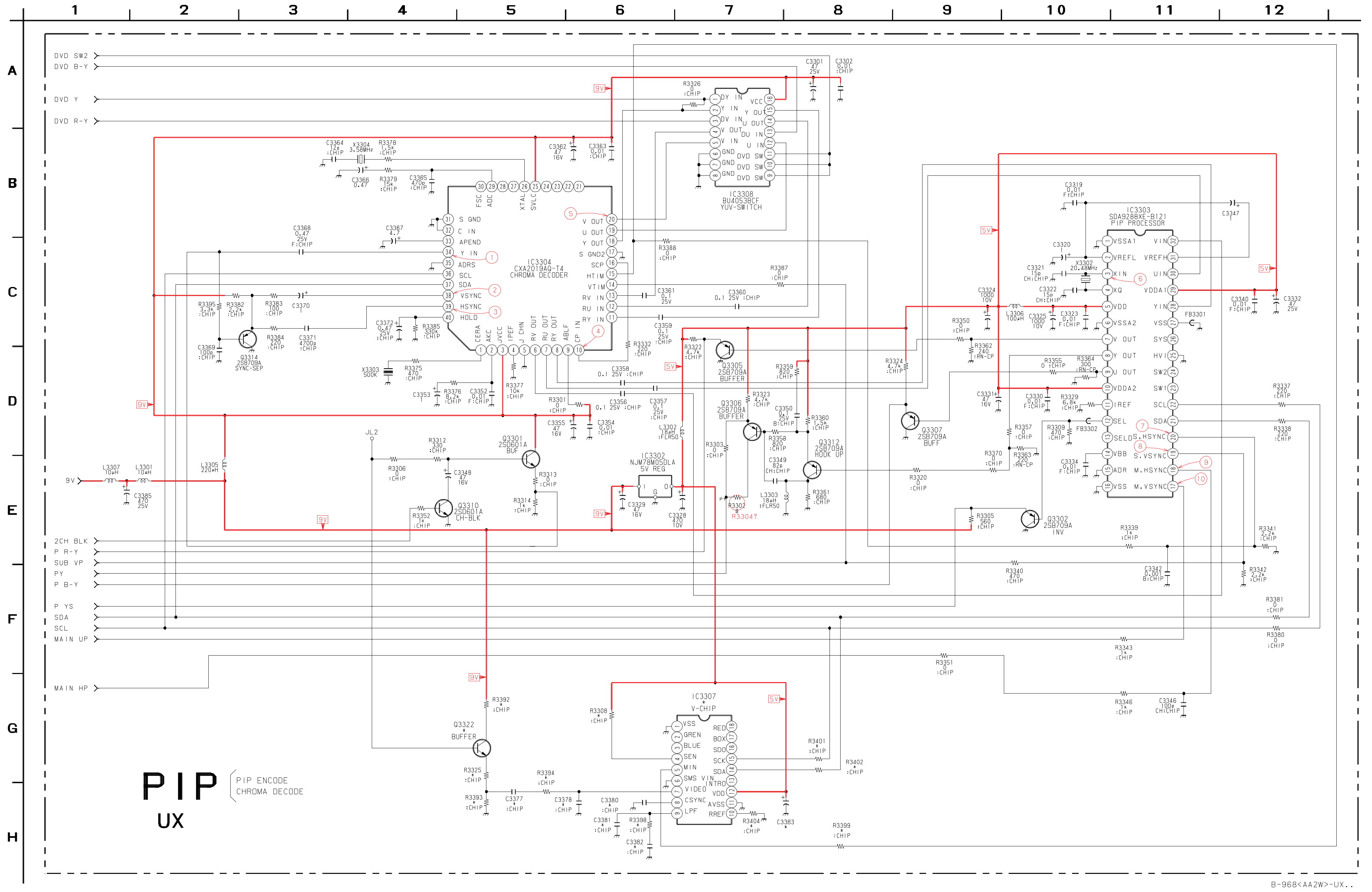
	B	C	E
Q1051	8.9	-0.1	8.8
Q1201	8.4	0	8.9
Q1202	0	4.4	GND
Q1203	0	4.4	GND
Q1204	8.4	0	8.9
Q1205	4.4	8.9	3.9
Q1206	4.4	8.9	3.8
Q1207	8.9	3.8	9.0
Q1208	8.9	3.8	9.0
Q1405	8.9	0	GND
Q1406	8.9	0	GND
Q2001	3.3	4.9	2.7
Q2003	1.7	GND	2.4
Q2004	1.65	GND	2.3
Q2005	2.8	8.3	2.2
Q2006	7.0	8.9	6.4
Q2007	2.2	4.4	1.6
Q2008	2.1	5.2	1.5
Q2009	4.4	8.9	3.8
Q2010	5.2	8.3	4.3
Q2011	0.1	4.4	GND
Q2012	1.8	GND	2.5
Q2013	4.9	0.5	5.0
Q2014	5.2	8.3	4.6
Q2015	3.4	4.9	3.6
Q2016	2.6	8.3	2.0
Q2017	4.6	8.3	3.9
Q2018	1.2	GND	1.9
Q2019	1.9	0	2.3
Q2119	1.9	GND	2.3

All voltages are in V

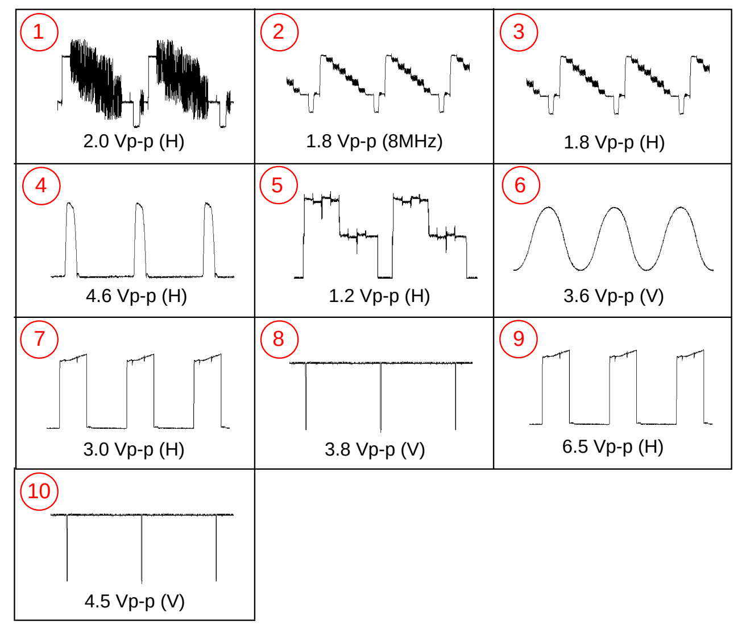
UX (MAIN) BOARD WAVEFORMS



UX PIP BOARD SCHEMATIC DIAGRAM



UX (PIP) BOARD WAVEFORMS



UX (PIP) BOARD IC VOLTAGE LIST

IC3302		18	0.2	8	2.8	32	GND	14	4.7
pin	volt	19	0.1	9	8.5	33	3.7	15	4.7
IN	8.7	20	0.4	10	0.7	34	3.6	16	NC
OUT	5.1	21	4.7	11	3.6	35	GND	17	NC
GND	GND	22	4.7	12	4.2	36	4.7	18	NC
IC3303		23	NC	13	4.2	37	4.7	IC3308	
pin	volt	24	NC	14	0.1	38	4.1	pin	volt
1	GND	25	GND	15	0.7	39	3.3	1	3.5
2	3.0	26	NC	16	0.7	40	0.6	2	2.7
3	2.3	27	0	17	GND	IC3307		3	3.2
4	1.8	28	1.7	18	2.7	pin	volt	4	2.7
5	4.8	29	5.0	19	2.7	1	GND	5	2.7
6	GND	30	2.2	20	2.7	2	NC	6	GND
7	0.1	31	4.0	21	NC	3	NC	7	GND
8	0	32	2.2	22	NC	4	5.1	8	GND
9	0.2	IC3304		23	NC	5	0.7	9	0.3
10	5.0	pin	volt	24	NC	6	GND	10	0.3
11	1.9	1	2.1	25	8.5	7	2.9	11	0.3
12	0	2	3.9	26	2.2	8	2.4	12	2.7
13	NC	3	8.5	27	NC	9	1.4	13	3.2
14	-2.9	4	1.6	28	NC	10	1.1	14	2.7
15	GND	5	GND	29	4.3	11	GND	15	2.7
16	GND	6	2.8	30	NC	12	5.1	16	8.5
17	5.0	7	2.8	31	GND	13	NC		

All voltages are in V

UX (PIP) BOARD TRANSISTOR VOLTAGE LIST

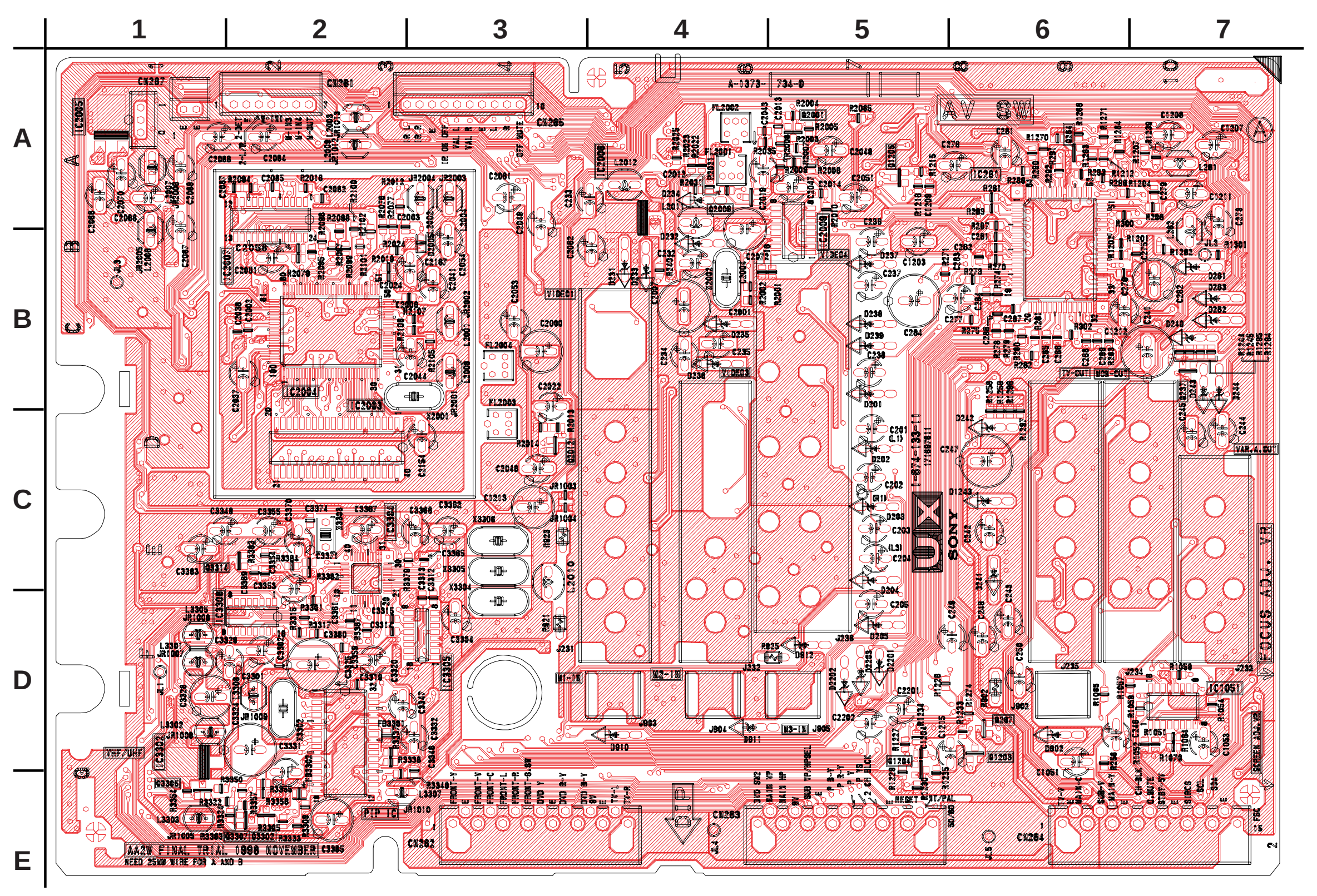
Q3301	4.4	8.4	3.7
Q3302	0	GND	0.7
Q3305	0.1	GND	0.7
Q3306	0.6	0	1.2
Q3307	0.2	GND	0.8
Q3310	0	4.3	GND
Q3312	0	0	0.6
Q3314	3.7	GND	4.4
Q3322	4.4	8.7	3.7

All voltages are in V

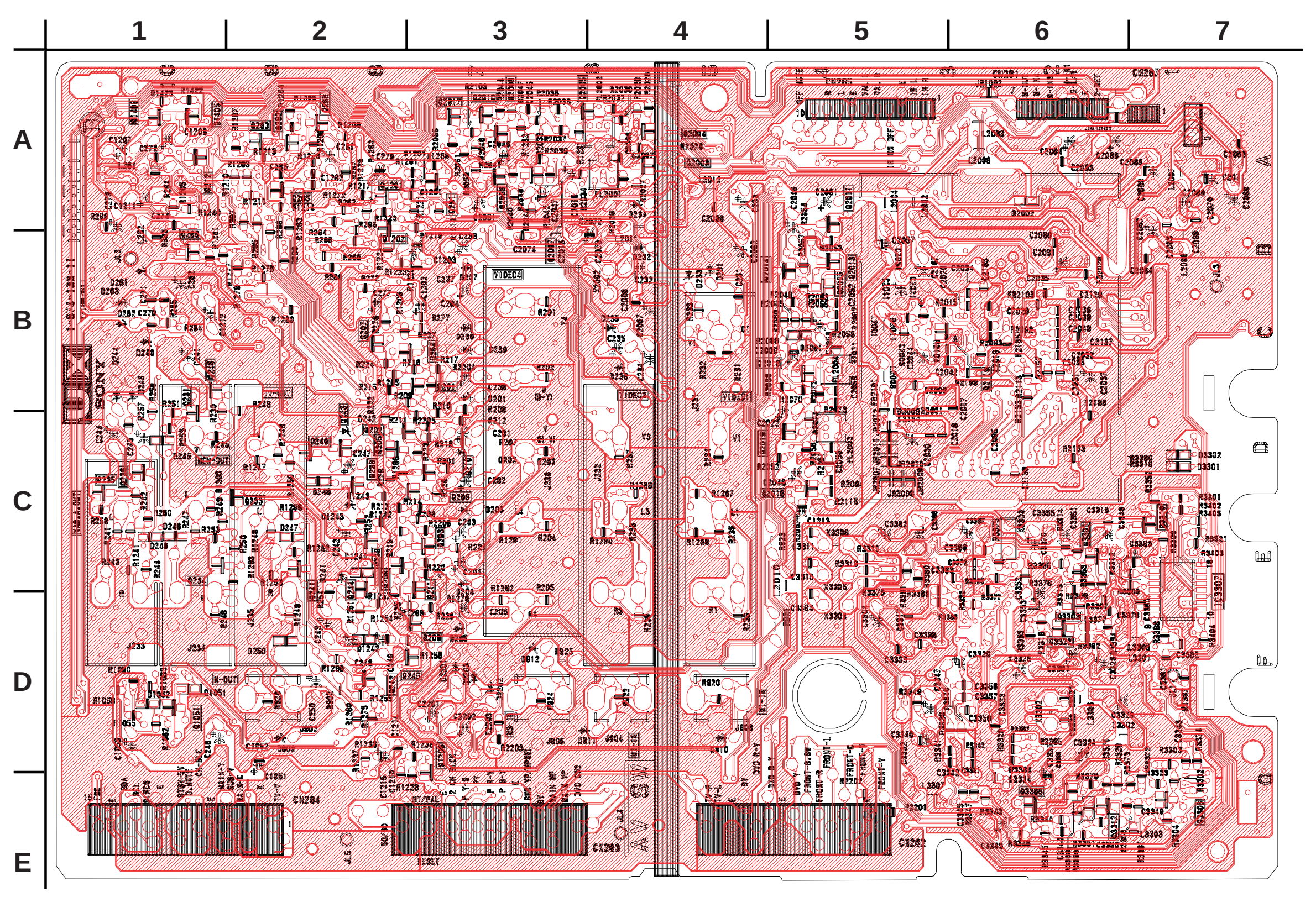
UX

[3D DIGITAL, COMB FILTER, AV SW, AUDIO CONTROL, SRS, PIP ENCODE, CHROMA DECODE]

[COMPONENT SIDE]



[CONDUCTOR SIDE]



UX (PIP) BOARD (*) MARK LIST

REF. NO.	LOCATION	KV-32XBR250 KV-34FX250C KV-36XBR250 KV-38FX250 KV-38FX250C KV-38FX250T
C3377	H-5	0.1
C3378	H-6	560p
C3380	H-6	0.1
C3381	H-6	0.0068
C3382	H-6	0.068
C3383	H-8	0.1
IC3307	G-7	Z86130112SSC
Q3322	G-5	2SD601A-Q
R3308	G-6	0
R3325	G-5	100
R3392	G-5	0
R3393	H-5	100
R3394	H-5	470
R3398	H-6	6.8K
R3399	H-8	100
R3401	G-8	100
R3402	G-8	100
R3404	H-7	10K

UX BOARD LOCATOR LIST

DIODE		
	A	B
D231	B-4	
D232	B-4	
D233	B-4	
D234	A-4	
D235	B-4	
D236	B-4	
D237	B-5	
D238	B-5	
D239	B-5	
D245		C-1
D246		C-1
D247		C-2
D248		C-1
D249		C-2
D250		D-2
D261	B-7	
D902	D-6	
D910	D-4	
D911	D-4	
D1051		D-1
D2005	B-3	
D1052		D-1
D2201	D-5	
D2202	D-5	
D2203	D-5	

IC		
	A	B
IC261	A-6	
IC1051	D-7	
IC2003	B-2	
IC2004	B-2	
IC2005	A-1	
IC2006	A-4	
IC2007	B-2	
IC2009	B-5	
IC3302	D-1	
IC3303	D-2	
IC3304	C-3	
IC3305	D-3	
IC3307		C-7

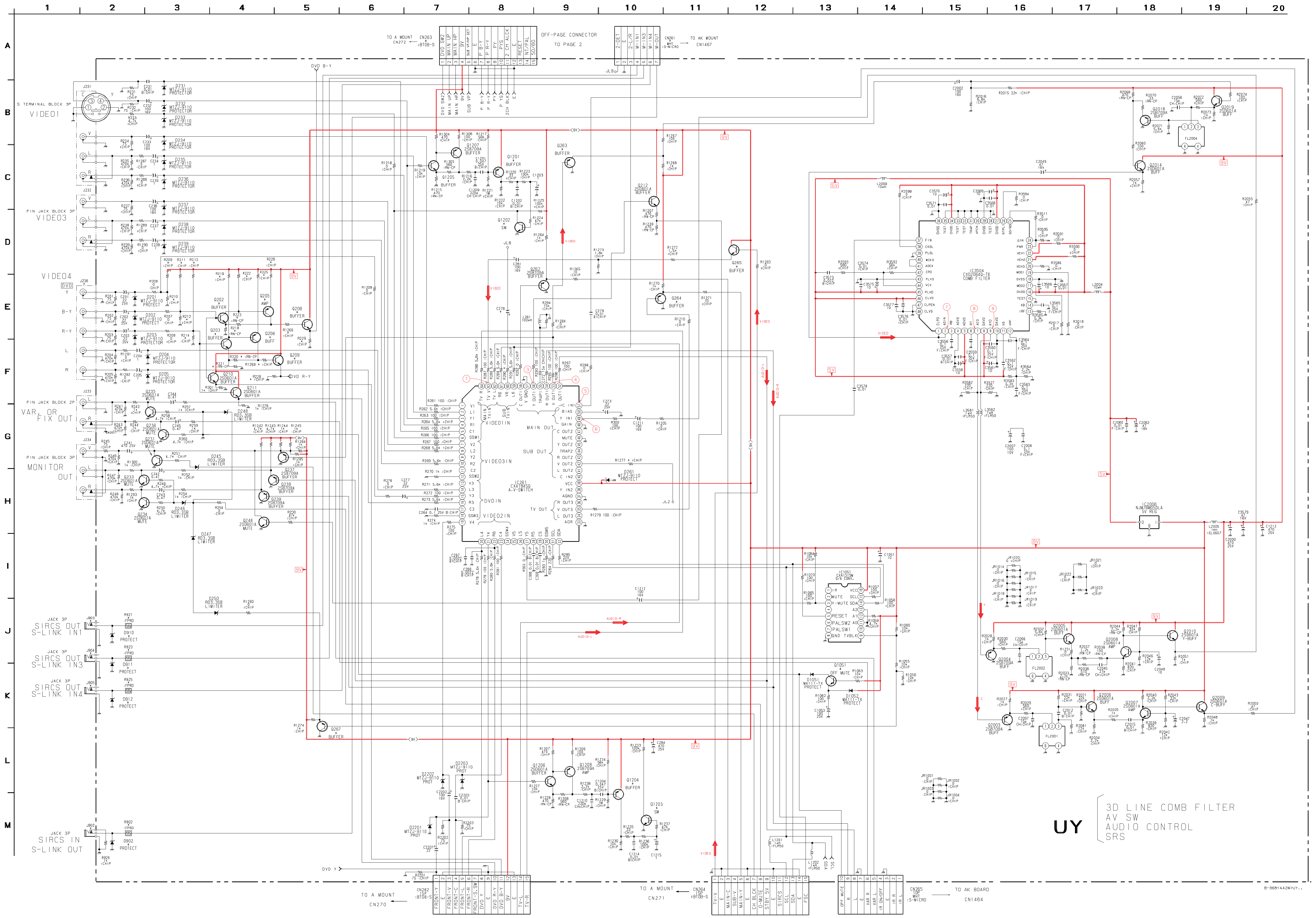
TRANSISTOR		
	A	B
Q212		A-1
Q231		C-1
Q233		C-2
Q234		C-1
Q235		C-1
Q236		C-1
Q237	B-7	
Q238		C-2
Q239		C-2
Q240		C-2
Q241		C-2
Q242		D-2
Q243		C-2
Q244		C-2
Q245		D-2
Q246		B-1
Q262		A-2
Q263		A-2
Q264	A-9	
Q265		A-2

	A	B
Q266		B-1
Q267	D-6	
Q268		A-2
Q1051		D-1
Q1201		A-2
Q1202		B-2
Q1203	D-6	
Q1204	D-5	
Q1205	A-5	
Q1206		D-3
Q1405		A-1
Q1406		A-1
Q2001		A-5
Q2003		A-4
Q2004		A-4
Q2005		A-4
Q2006	A-4	
Q2007		B-3
Q2008		A-3
Q2009		A-3
Q2010		A-3

	A	B
Q2011		A-5
Q2012	C-3	
Q2013		B-5
Q2014		B-5
Q2015		B-5
Q2016		B-5
Q2017		A-3
Q2018		C-5
Q2019		C-5
Q2119		B-6
Q3301		C-6
Q3302	E-2	
Q3305	E-1	
Q3306		E-6
Q3307	E-2	
Q3310		C-7
Q3312		E-6
Q3314	C-1	
Q3322		D-6

Schematic diagrams
← **UX main board**
UX PIP board →

UY MAIN BOARD SCHEMATIC DIAGRAM


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
A B C D E F G H I J K L M
S TERMINAL BLOCK 3P
VIDEO1
PIN JACK BLOCK 3P
VIDEO3
VIDEO4
PIN JACK BLOCK 2P
VAR. OR FIX OUT
PIN JACK BLOCK 3P
MONITOR OUT
JACK 3P
SIRCS OUT S-LINK IN1
SIRCS OUT S-LINK IN3
SIRCS OUT S-LINK IN4
SIRCS IN S-LINK OUT
TO A MOUNT CN272
TO A MOUNT CN270
TO A MOUNT CN271
TO AK MOUNT CN1467
TO AK BOARD CN1464
OFF-PAGE CONNECTOR TO PAGE 2
BUFFER
PROTECTOR
VIDEO1IN
VIDEO2IN
VIDEO3IN
MAIN OUT
SUB OUT
TV OUT
COMB FILTER
MUTE
UY
3D LINE COMB FILTER
AV SW
AUDIO CONTROL
SRS

UY MAIN BOARD (*) MARK LIST

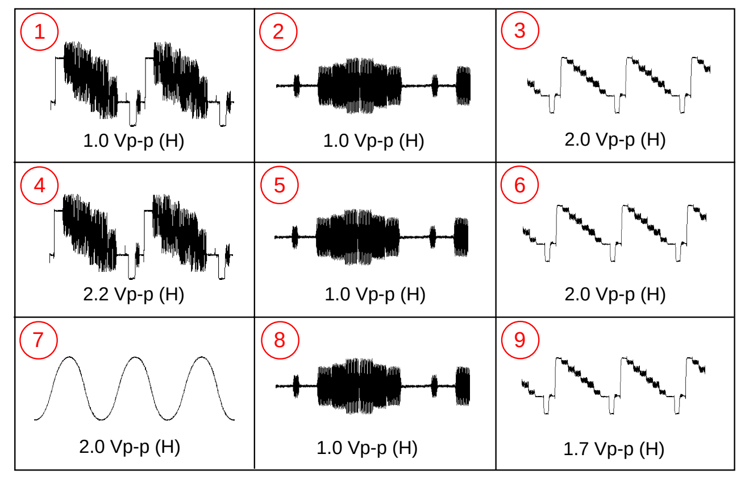
REF. NO.	LOCATION	KV-32FS10 KV-36FS10	KV-32FV15 KV-36FV15	KV-34FV15 KV-34FV15C KV-34FV15K KV-38FV15T
C278	E-8	#	22	22
CN261	A-10	#	CONNECTOR	CONNECTOR
CN263	A-8	#	BOARD	BOARD
D902	M-2	#	MTZJ-T-9110	MTZJ-T-9110
D910	J-2	#	MTZJ-T-9110	MTZJ-T-9110
D911	K-2	#	MTZJ-T-9110	MTZJ-T-9110
D912	K-2	#	MTZJ-T-9110	MTZJ-T-9110
J902	M-2	#	3P	3P
J903	J-2	#	3P	3P
J904	J-2	#	3P	3P
J905	K-2	#	3P	3P
Q202	E-4	#	2SD601A-Q	2SD601A-Q
Q203	E-4	#	2SD601A-Q	2SD601A-Q
Q205	E-4	#	2SA1162-G	2SA1162-G
Q206	E-4	#	2SA1162-G	2SA1162-G
Q208	E-5	#	2SD601A-Q	2SD601A-Q
Q209	F-5	#	2SD601A-Q	2SD601A-Q
Q263	C-9	2SA1162-G	#	2SA1162-G
Q264	E-11	2SA1162-G	#	2SA1162-G
Q265	D-12	2SD601A-Q	#	2SD601A-Q
Q267	L-5	2SA1162-G	#	2SA1162-G
Q1051	K-13	2SA1162-G	#	2SA1162-G
Q1201	C-8	2SA1162-G	#	2SA1162-G
Q1202	D-8	2SD601A-Q	#	2SD601A-Q
Q1203	M-10	2SD601A-Q	#	2SD601A-Q
Q1204	L-10	2SA1162-G	#	2SA1162-G
Q1205	C-7	2SD601A-Q	#	2SD601A-Q
R209	D-3	#	47K	47K
R210	E-3	#	22K	22K
R211	D-3	#	47K	47K
R212	E-3	#	22K	22K
R213	D-3	#	47K	47K
R214	E-3	#	22K	22K
R218	E-4	#	470	470
R219	D-4	#	1K	1K
R220	F-4	#	560	560
R221	F-4	#	470	470
R222	D-4	#	1K	1K
R223	E-4	#	560	560
R225	D-4	#	100	100
R226	D-4	#	100	100
R228	F-4	#	1K	1K
R229	E-5	#	1K	1K
R290	F-8	#	100	100
R902	M-2	#	100	100
R921	J-2	#	100	100
R923	J-2	#	100	100
R925	K-2	#	100	100
R1266	E-5	#	470	470
R1269	F-4	#	470	470
R1277	G-10	#	100	100

UY (MAIN) BOARD TRANSISTOR VOLTAGE LIST

	B	C	E
Q202	2.7	8.1	2.1
Q203	2.7	8.1	2.1
Q205	8.1	4.1	8.7
Q206	8.1	4.1	8.7
Q208	4	9.1	3.4
Q209	4	9.1	3.4
Q210	2.7	9.1	2.1
Q211	2.7	9.1	2.1
Q212	4.6	9.1	3.9
Q231	0	0.2	GND
Q233	-0.1	0	GND
Q234	-0.1	0	GND
Q235	-0.1	0	GND
Q236	-0.1	0	GND
Q237	4.6	GND	0.3
Q238	4.7	GND	5.3
Q239	4.7	GND	5.3
Q246	0.3	0.2	GND
Q262	4.6	GND	5.2
Q263	4.6	GND	5.2
Q264	4.4	GND	5.0
Q265	4.5	9.1	3.8
Q267	0.2	GND	0.9
Q1051	9.1	-1.4	9.0
Q1201	8.6	0	9.1
Q1202	0	4.4	GND
Q1203	0	4.4	GND
Q1204	8.6	0	9.1
Q1205	4.6	9.1	4.0
Q1206	4.6	9.1	4.0
Q1207	8.9	3.8	9.0
Q1208	8.9	3.8	9.0
Q2003	1.1	GND	1.8
Q2004	1.1	GND	1.8
Q2005	4.5	9.1	3.8
Q2006	4.5	9.1	3.9
Q2007	2.3	4.4	1.7
Q2008	2.3	4.6	1.6
Q2009	4.4	9.1	3.7
Q2010	4.6	9.1	3.9
Q2014	5.1	9.1	4.4
Q2018	4.1	GND	4.8
Q2019	5.2	9.1	4.5

All voltages are in V

UY (MAIN) BOARD WAVEFORMS



UY (MAIN) BOARD IC VOLTAGE LIST

IC261 pin	volt
1	4.5
2	4.5
3	4.5
4	4.5
5	4.5
6	4.5
7	4.5
8	4.5
9	NC
10	4.5
11	NC
12	0
13	4.5
14	4.5
15	4.5
16	4.5
17	4.5
18	0
19	4.5
20	4.5
21	4.5
22	4.5
23	4.5
24	NC
25	NC
26	NC
27	4.5
28	4.5
29	4.5
30	0
31	4.7
32	4.7
33	GND
34	NC
35	4.2
36	NC
37	GND
38	NC
39	9
40	NC
41	NC
42	4.4
43	NC
44	NC
45	NC
46	GND
47	NC
48	GND
49	4.5
50	4.5
51	4.5
52	4.6
53	4.4
54	4.6
55	4.4
56	4.4
57	GND
58	4.4
59	4.5
60	4.5
61	4.5
62	4.5
63	4.5
64	4.5

IC1051 pin	volt
1	NC
2	NC
3	0.4
4	NC
5	6.1
6	NC
7	NC
8	GND
9	6.0
10	NC
11	GND
12	8.9
13	GND
14	4.7
15	4.7
16	8.9

IC2006 pin	volt
IN	9.0
OUT	4.9
GND	GND

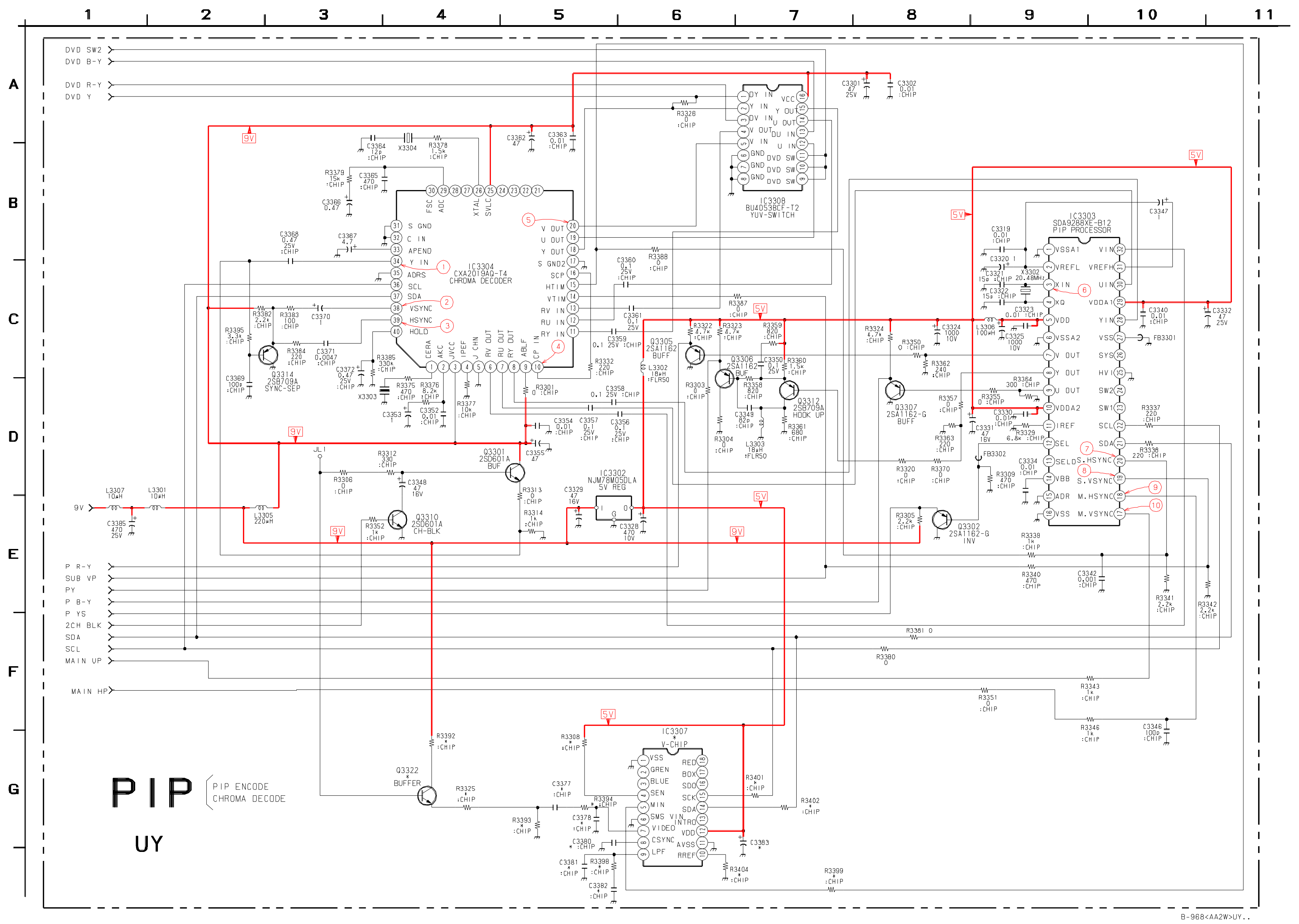
IC2009 pin	volt
1	4.8
2	GND
3	4.8
4	NC
5	4.8
6	NC
7	NC
8	GND
9	4.7
10	4.7
11	4.8
12	NC
13	NC
14	GND
15	NC
16	NC

IC3504 pin	volt
1	1.4
2	1.4
3	0.5
4	0
5	4.8
6	2.6
7	1.0
8	4.8
9	1.0
10	0
11	2.7
12	2.0
13	2.0
14	1.0
15	GND
16	4.8
17	0.3
18	GND
19	0.3
20	0
21	4.8
22	4.8
23	0
24	0
25	0
26	0
27	4.8
28	GND
29	GND
30	GND
31	GND
32	GND
33	GND
34	4.8
35	GND
36	GND
37	2.3
38	4.8
39	GND
40	2.2
41	2.2
42	3.3
43	0
44	3.3
45	4.8
46	4.8
47	GND
48	GND

All voltages are in V

KV-32FS10/32FV15/32XBR250/34FV10/34FV15/34FV15C/34FX250C/34FV15K
34FV15T/36FS10/36FV15/36XBR250/38FX250/38FX250C/38FX250T/38FV15K

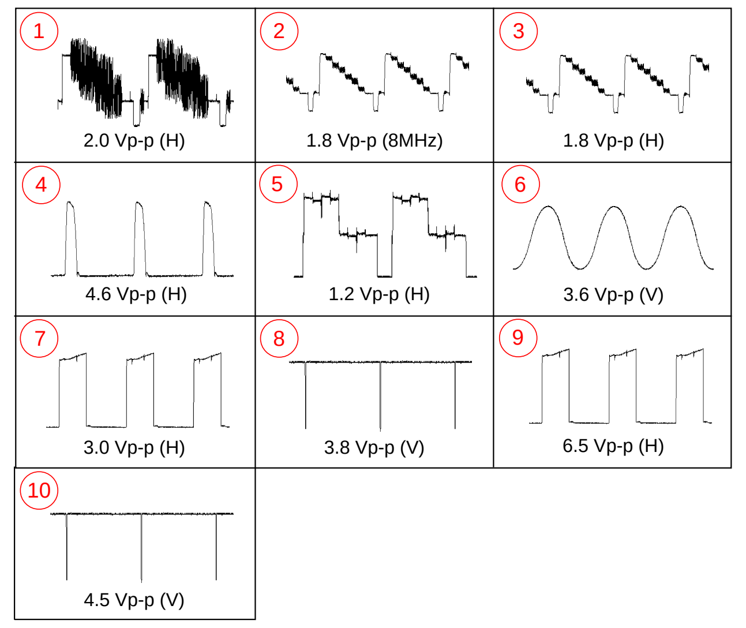
UY PIP BOARD SCHEMATIC DIAGRAM



UY (PIP) BOARD (*) MARK LIST

REF. NO.	LOCATION	KV-32FV15 KV-36FV15	KV-34FV15 KV-34FV15C KV-34FV15K KV-38FV15T
C3377	G-5	0.1	#
C3378	G-5	560p	#
C3380	G-5	0.1	#
C3381	G-5	0.0068	#
C3382	G-6	0.068	#
C3383	G-7	0.1	#
IC3307	G-6	Z86130112SSC	#
Q3322	G-4	2SD601A-Q	#
R3308	F-5	0	#
R3325	G-4	100	#
R3392	F-4	0	#
R3393	G-5	100	#
R3394	G-5	470	#
R3398	G-5	6.8K	#
R3399	G-7	100	#
R3401	G-7	100	#
R3402	G-7	100	#
R3404	G-8	10K	#

UY (PIP) BOARD WAVEFORMS



UY (PIP) BOARD IC VOLTAGE LIST

IC3302	
pin	volt
IN	8.9
OUT	5.1
GND	GND

IC3303	
pin	volt
1	GND
2	3.0
3	2.3
4	2.0
5	4.8
6	GND
7	0.1
8	0
9	0.1
10	5.0
11	1.9
12	0
13	NC
14	-2.9
15	GND
16	GND
17	5.1
18	0.2
19	0.1
20	0.4
21	4.5
22	4.5
23	NC
24	NC
25	GND
26	NC
27	0
28	2.0
29	5.0
30	2.3
31	4.0
32	2.3

IC3304	
pin	volt
1	2.2
2	4.0
3	8.7
4	1.7
5	GND
6	2.8
7	2.8
8	2.9
9	8.7
10	0.7
11	4.0
12	4.2
13	4.3
14	0.1
15	0.7
16	0.7

IC3305	
pin	volt
1	5.1
2	NC
3	GND
4	GND
5	0.7
6	NC
7	NC
8	GND
9	5.1
10	GND
11	3
12	3
13	NC
14	1.4
15	NC
16	1.4
17	GND
18	3.4
19	2.8
20	2.8
21	NC
22	NC
23	NC
24	NC
25	8.7
26	2.4
27	NC
28	NC
29	4.3
30	NC
31	GND
32	GND
33	3.8
34	4.4
35	GND
36	4.6
37	4.5
38	3.8
39	3.1
40	1.1

IC3307	
pin	volt
1	GND
2	NC
3	NC
4	5.1
5	0.7
6	GND
7	1.2
8	0
9	1.5
10	1.1
11	GND
12	5.1
13	NC
14	4.5
15	4.5
16	NC
17	NC
18	NC

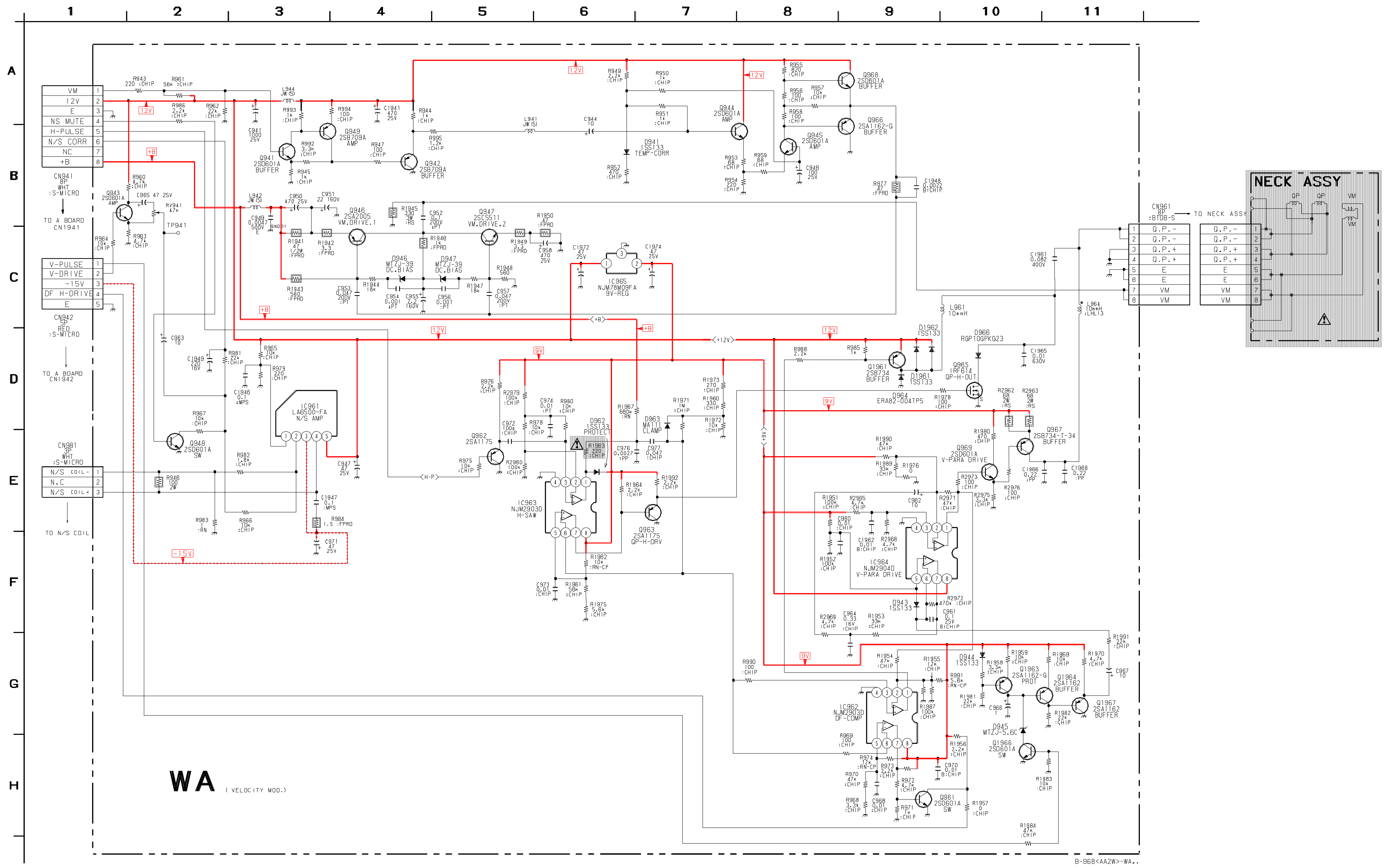
All voltages are in V

UY (PIP) BOARD TRANSISTOR VOLTAGE LIST

Q3301	5.2	8.6	4.5
Q3302	0	0	0.7
Q3305	0	0	0.7
Q3306	0.6	0	1.2
Q3307	0.1	0	0.7
Q3310	0	4.9	GND
Q3312	0	0	0.6
Q3314	4.6	0	5.2
Q3322	5.2	6.1	6.6

All voltages are in V

WA BOARD SCHEMATIC DIAGRAM



WA BOARD IC VOLTAGE LIST

IC961	
pin	volt
1	0.2
2	0.3
3	-13.0
4	4.6
5	11.8

IC962	
1	9.7
2	5.2
3	6.6
4	GND
5	6.9
6	6.6
7	3.5
8	8.9

IC963	
1	2.1
2	4.2
3	4.6
4	GND
5	7.5
6	6.7
7	6.1
8	8.9

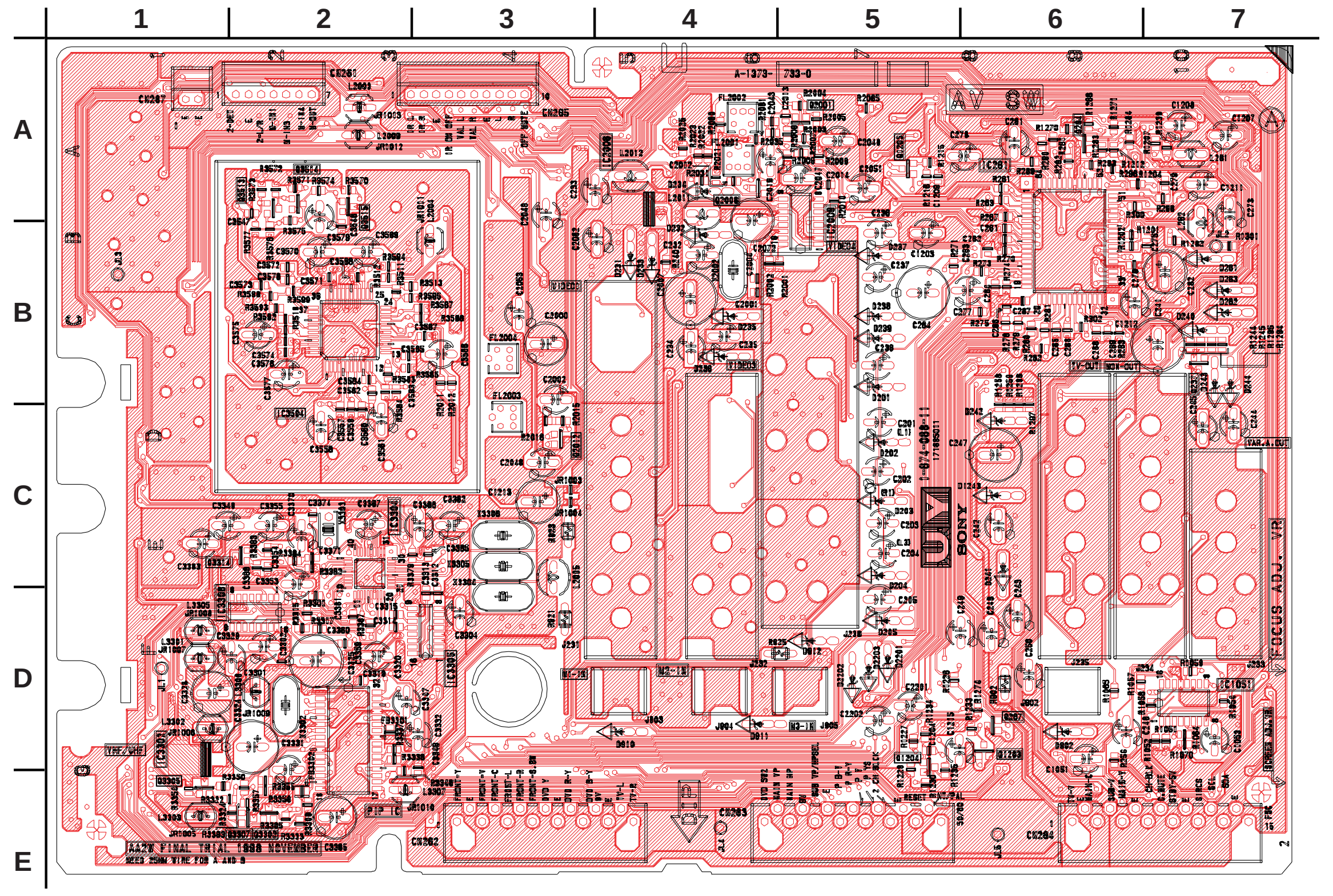
IC964	
1	7.4
2	4.4
3	4.4
4	GND
5	4.4
6	4.4
7	4.4
8	11.8

IC965	
pin	volt
IN	11.8
OUT	8.9
GND	GND

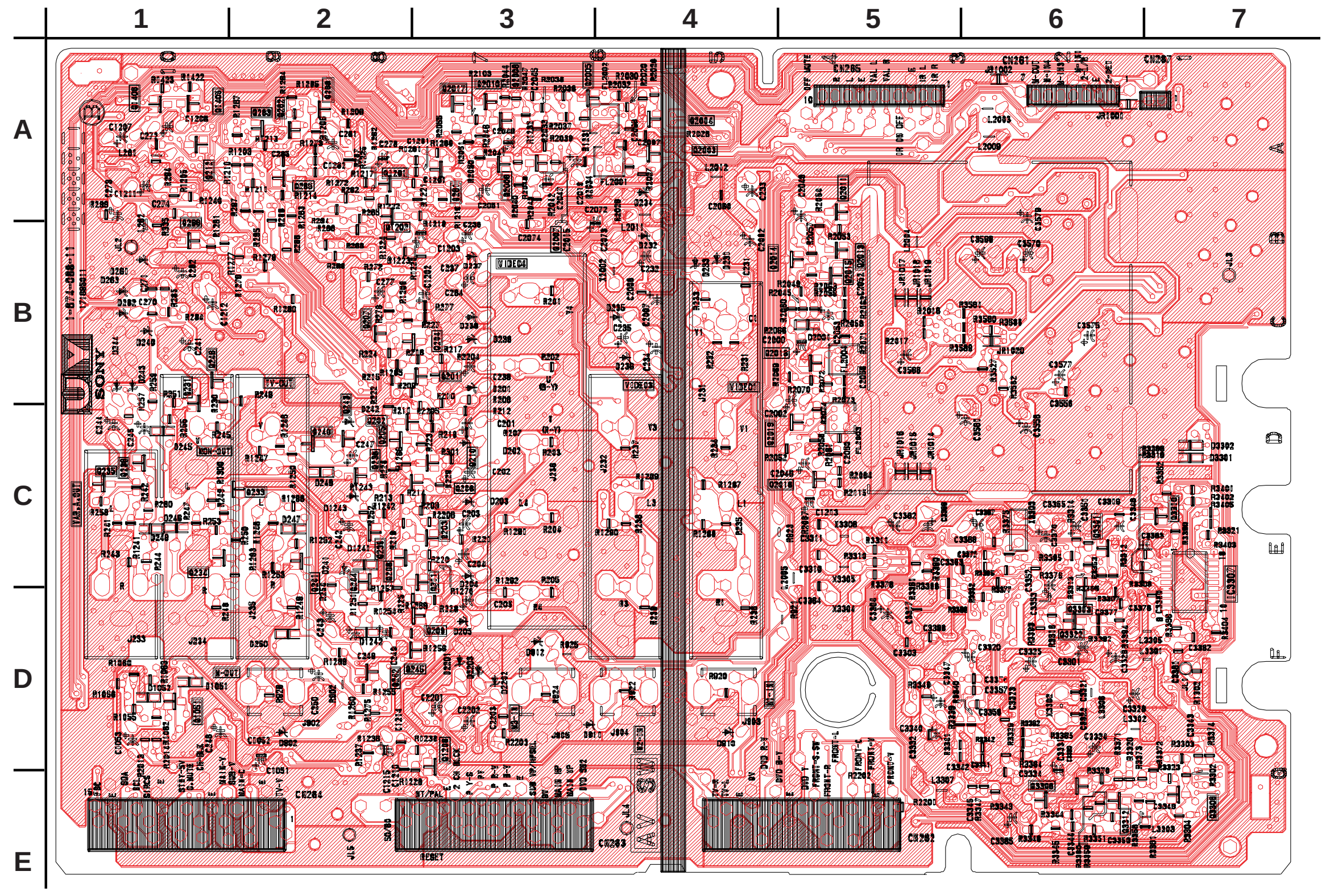
All voltages are in V

UY [3D LINE, COMB FILTER, AV SW, AUDIO CONTROL, SRS]

[COMPONENT SIDE]



[CONDUCTOR SIDE]



UY BOARD LOCATOR LIST

DIODE		
	A	B
D231	B-4	
D232	B-4	
D233	B-4	
D234	A-4	
D235	B-4	
D236	B-4	
D237	B-5	
D238	B-5	
D239	B-5	
D245		C-1
D246		C-1
D247		C-2
D248		D-2
D250		D-2
D261	B-7	
D902	D-6	
D910	D-4	
D911	D-4	
D1051		D-1
D1052		D-1
D2201	D-5	
D2202	D-5	
D2203	D-5	

IC		
	A	B
IC261	A-6	
IC1051	D-7	
IC2006	A-4	
IC3302	D-1	
IC3303	D-2	
IC3304	C-3	
IC3305	D-3	
IC3307		D-7
IC3504	B-2	
TRANSISTOR		
Q212	A-1	
Q231		C-1
Q233		C-2
Q234		C-1
Q235		C-1
Q236		C-1
Q237	B-7	
Q238		C-2
Q239		C-2
Q246	B-1	
Q262		A-2
Q263		A-2
Q264	A-9	
Q265		A-2
Q266	B-1	
Q267	D-6	
Q1051		D-1
Q1201		A-2
Q1202		B-2
Q1203	D-6	
Q1204	D-5	
Q1205		A-5
Q1206		D-3
Q2003	D-5	
Q2004		A-4
Q2005	A-5	
Q2006	A-4	
Q2007		B-3
Q2008		A-3
Q2009		A-3
Q2010		A-3
Q2014		B-5
Q2018		C-5
Q2019		C-5
Q3301		C-6
Q3302	E-2	
Q3305	E-1	
Q3306		E-6
Q3307	E-2	
Q3310		C-7
Q3312		E-6
Q3314	C-1	
Q3322		D-6

WA BOARD TRANSISTOR VOLTAGE LIST

	B	C	E
Q943	3.5	8.3	2.9
Q944	2.6	11.9	1.9
Q945	2.6	8.0	1.9
Q946	134.0	67.5	134.6
Q947	0.9	67.5	0.3
Q948	0	1.7	GND
Q961	0.4	0.3	GND
Q962	0.4	GND	1.1
Q963	6.1	GND	6.2
Q966	8.0	GND	8.4
Q967	6.8	0.4	7.4
Q968	8.8	11.9	8.4
Q969	7.4	8.0	6.8
Q1961	11.7	2.4	11.8
Q1963	7.2	6.4	7.8
Q1964	6.4	4.2	7.0
Q1966	-2.0	3.5	GND
Q1967	4.2	GND	4.8

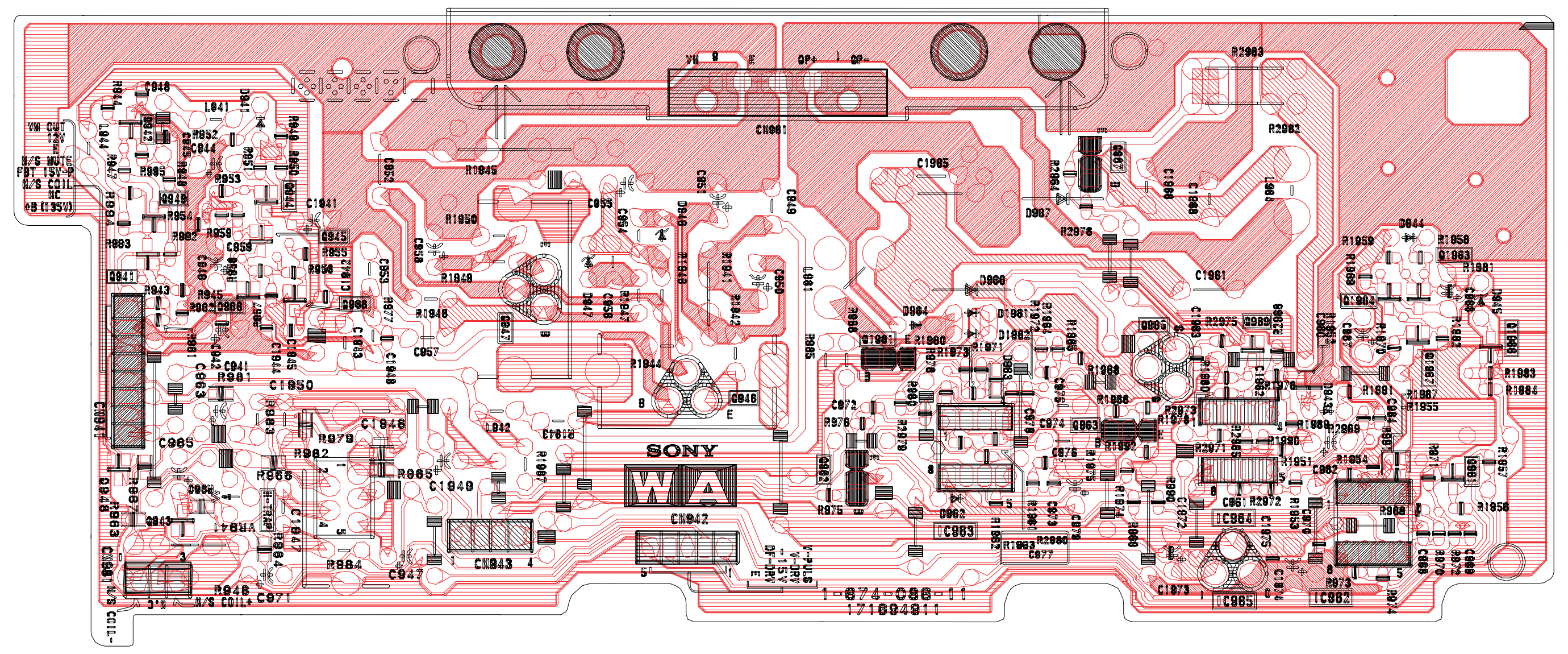
All voltages are in V

WA BOARD TRANSISTOR VOLTAGE LIST

	D	G	S
Q965	4.9	6.2	GND

All voltages are in V

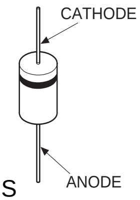
WA [VELOCITY MOD., QUAD POLE ROT.]



Schematic diagrams
← UY main board
UY PIP WA boards →

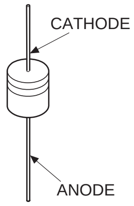
6-8. SEMICONDUCTORS

D1NL20U
D2L20U
EL1Z
EGP20G
EGP30G
ERA22-08
ERC06-15S
ERD29-08J
EZ0150AV1
GP08D
MTZJ-33A
1SS83

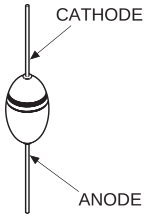


D1NS4
MTZJ-XXA
MTZJ-XXB
MTZJ-XXC
RDXXESB1
RDXXESB2
RDXXESB3
1SS119-25
1SS133T-77

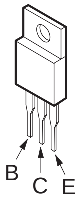
(XX = VALUE)



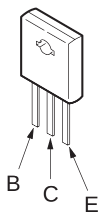
U05G



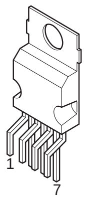
2SA1837
2SC4159-E
2SC4793
2SD2012



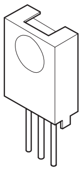
2SC4834M



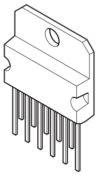
TDA8172



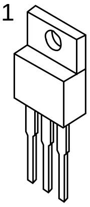
SBX1981



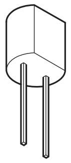
TDA2009A
TDA7262



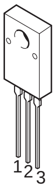
NJM78M05FA
PQ09RF21
TA7805S
BA05T



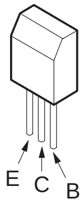
IC LINK
2A/90V



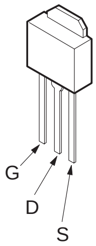
D10SC4M



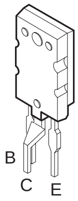
2SC3209LK



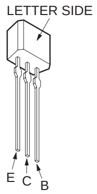
2SK2845-LB102



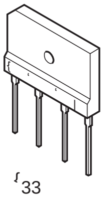
TSC5148
(LE SONY)



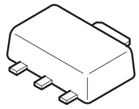
2SA1175-HFE
2SA933AS-QRT
2SC2785-HFE



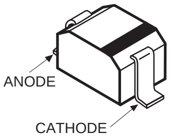
D10SBS4F
D6SB60L
D4SB60L



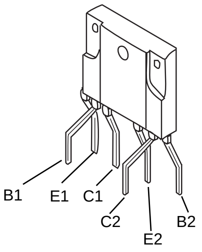
S-80748AL

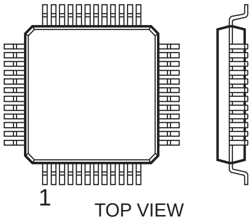


MA111
RD3.3SB
1SS355



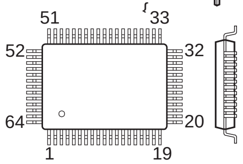
MX0842B-F



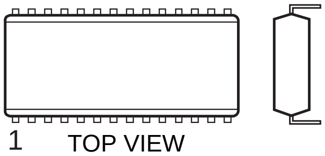


TOP VIEW
40 pin

CXA2019Q



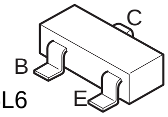
TOP VIEW
CXA1845Q - 64 pin
LC27016 - 80 pin
SAB9076AH
µPD6488GF-33A
µPD64081BGF-3BA - 100 pin



TOP VIEW
32 pin DIP

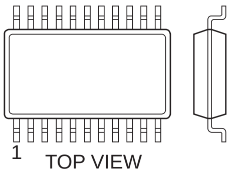
BH3868FS-E2
V53C16258SHK - 40 pin DIP

2SA1037K-T146-R
2SA1162-G
2SA1330-06
2SB709A
2SC1623-L5L6
2SD601A-Q



8 pin SOP
NJM2903D
NJM2903M
NJM2904D
ST24C02FM6TR
µPC4558G2
X24C04SB

16 pin SOP
BU4053BCF-T2
CXA1315M
MC14052BF
MC14538B
NJM2145M-TE2
CXD2064Q-T6



TOP VIEW

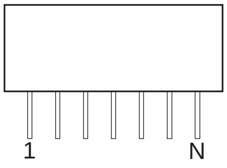
20 pin SOP
NJM2150M

24 pin SOP
CXA2039M-T6

28 pin SOP
MN47V76ST1
MN47V77ST1

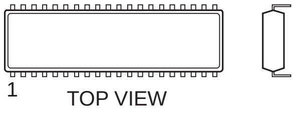
36 pin SOP
µPC1862GS-E2

DM-58



MARKING SIDE VIEW

Epin 1 ‘ N
EMt (one side, both sides)



TOP VIEW

14 pin DIP
NJM2902M

16 pin DIP
MM1093N

20 pin DIP
TA1226N

22 pin DIP
CXA2021S

28 pin DIP
TDA7467

30 pin DIP
CXD2073S

40 pin DIP
SDA9288XE

42 pin DIP
MM1311AD
MM1313AD

48 pin DIP
CXA2131S

64 pin DIP
CXP85856A-029S

SECTION 7
EXPLODED VIEW

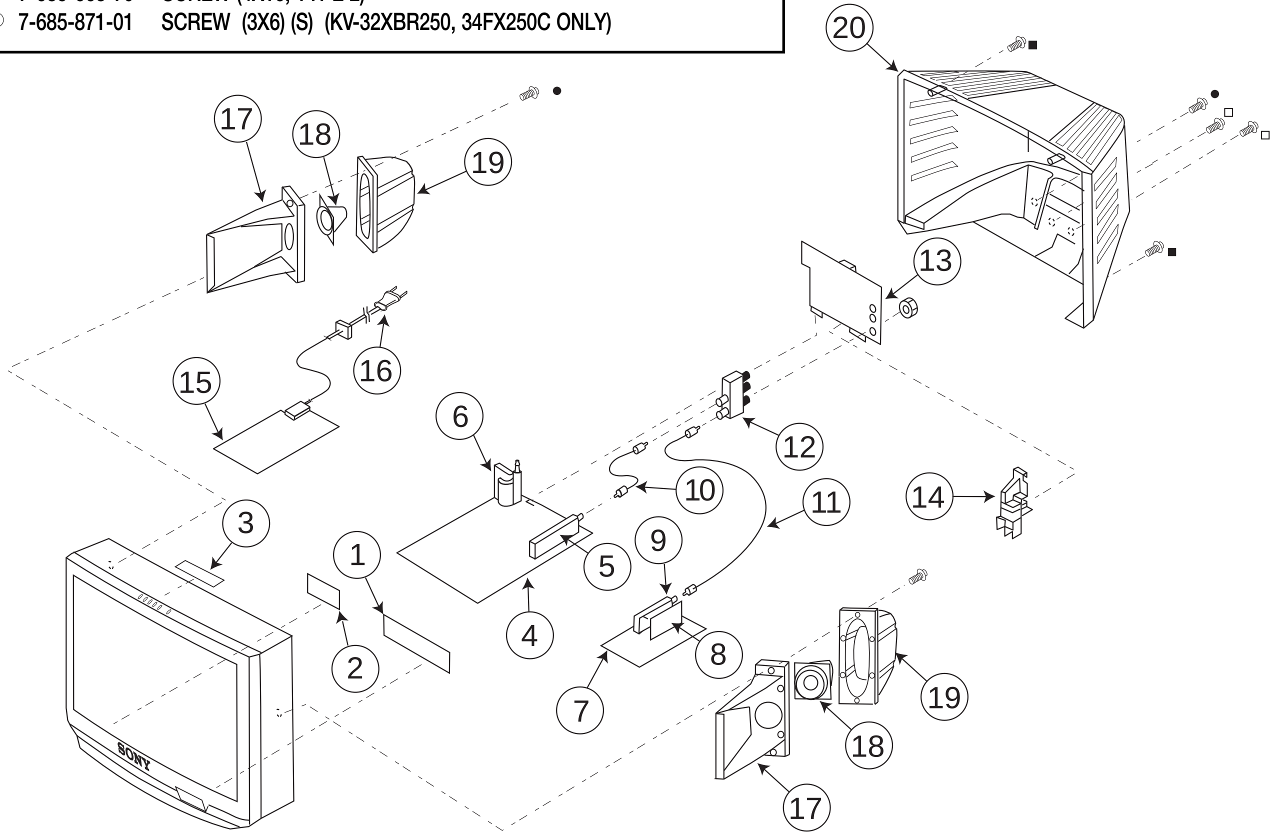
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The component parts of an assembly are indicated by the reference numbers in the remarks column.
- Items marked with an asterisk " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and "⚠" are critical for safety. Replace only with specified part number.

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

7-1. CHASSIS (KV-32FS10/32FV15/32FV15C/32XBR250/34FV10 34FV15/34FV15K/34FV15T/34FX250C)

■ 7-682-566-04 SCREW (M4X20), TAPPING, (+-)(BV) (KV-32FS10, 34FV10 EXCLUDED)
☐ 7-685-648-79 SCREW (3X12, TYPE 2)
● 7-685-663-79 SCREW (4X16, TYPE 2)
○ 7-685-871-01 SCREW (3X6) (S) (KV-32XBR250, 34FX250C ONLY)



REF.NO.	PART NO.	DESCRIPTION	REMARK
1	* A-1372-634-A	HA BOARD, COMPLETE	
2	* A-1372-635-A	HB BOARD, COMPLETE	
3	* A-1372-636-A	HX BOARD, COMPLETE	
4	* A-1298-890-A	A BOARD, COMPLETE (KV-32FS10/ 32FV15/32XBR250/34FV10/34FV15/34FV15C/ 34FX250C Only)	
4	* A-1298-965-A	A BOARD, COMPLETE (KV34FV15T Only)	
4	* A-1298-969-A	A BOARD, COMPLETE (KV34FV15K Only)	
5 ⚠	8-598-431-00	TUNER, FSS BTF-WA411 (KV-32FS10/32FV15/32XBR250/34FV10/ 34FV15/34FV15C/34FX250C Only)	
5 ⚠	8-598-475-00	TUNER, FSS BTF-WL411 (KV-34FV15K Only)	
5 ⚠	8-598-477-00	TUNER, FSS BTF-WG411 (KV-34FV15T Only)	
6 ⚠	1-453-286-11	FBT ASSY, NX4600//X4C4	
7	* A-1298-956-A	AK BOARD, COMPLETE (KV-32FS10/34FV10 Only)	
7	* A-1298-957-A	AK BOARD, COMPLETE (KV32FV15/34FV15/ 34FV15C/34FV15K/34FV15T Only)	
7	* A-1298-980-A	AK BOARD, COMPLETE (KV-32XBR250/ 34FX250C Only)	
8	* A-1394-934-A	T BOARD, COMPLETE (KV-32XBR250/ 34FX250C Only)	
9 ⚠	8-598-430-00	TUNER, BTF-FA401	
10	1-557-056-31	CABLE, P-P (KV-32FV15/32XBR250/34FV15/ 34FV15C/34FV15K/34FV15T/34FX250C Only)	

The components identified by shading and "⚠" are critical for safety. Replace only with specified part number.

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

REF.NO.	PART NO.	DESCRIPTION	REMARK
11	1-556-945-21	CABLE, P-P (KV-32FV15/32XBR250/34FV15/34FV15C/34FV15K/34FV15T/34FX250C Only)	
12	8-598-414-10	ANTENNA CHANGER AS-2F (KV-32FV15/32XBR250/34FV15/34FV15C/34FV15K/34FV15T/34FX250C Only)	
13 *	A-1394-947-A	UX BOARD, COMPLETE (KV-32XBR250 Only)	
13 *	A-1394-948-A	UX BOARD, COMPLETE KV-34FX250C Only)	
13 *	A-1394-938-A	UY BOARD, COMPLETE (KV-32FS10/34FV10 Only)	
13 *	A-1394-943-A	UY BOARD, COMPLETE (KV-32FV15 Only)	
13 *	A-1394-944-A	UY BOARD, COMPLETE (KV-34FV15/34FV15C/34FV15K/34FV15T Only)	
14	3-696-606-02	HINGE, VI	
15 *	A-1316-397-A	G BOARD, COMPLETE (KV-32FS10/32FV15/32XBR250 Only)	
15 *	A-1316-423-A	G BOARD, COMPLETE (KV-34FV15T Only)	
15 *	A-1316-470-A	GA BOARD, COMPLETE (KV-34FV10/34FV15/34FV15C/34FV15K/34FX250C Only)	

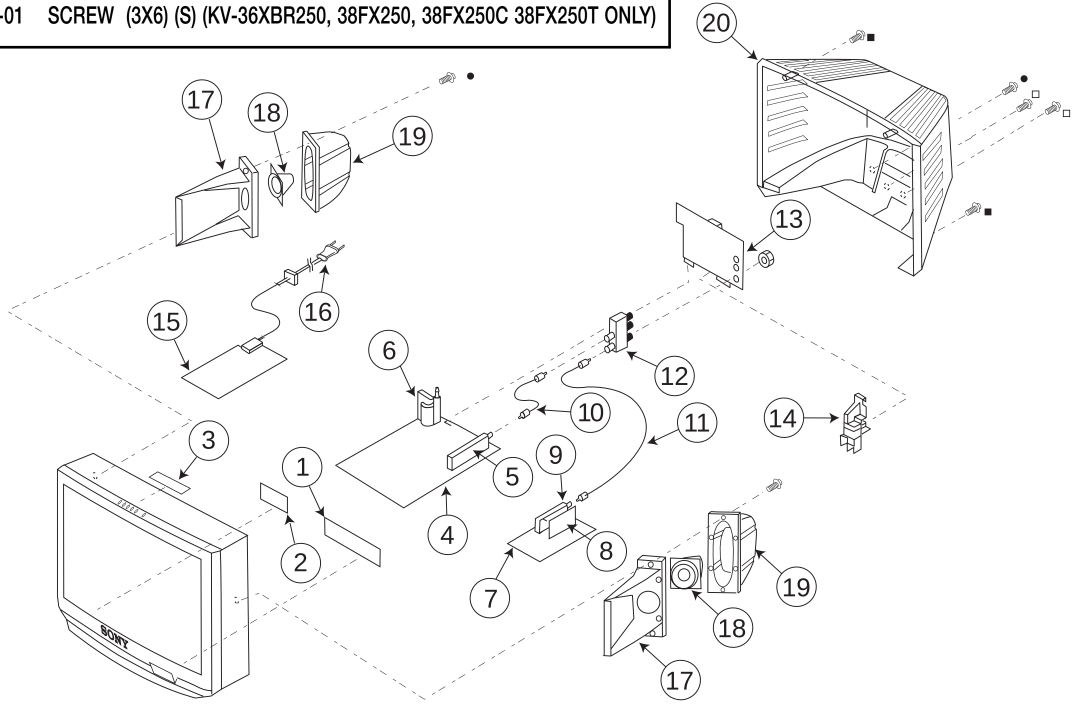
REF.NO.	PART NO.	DESCRIPTION	REMARK
16	⚠1-769-796-71	CORD, POWER (WITH CONNECTOR) (KV-34FV15C/34FX250C Only)	
16	⚠1-775-468-11	CORD, POWER (WITH CONNECTOR) (KV-34FV15K Only)	
16	⚠1-790-315-21	CORD, AC POWER (WITH CONNECTOR) (KV-34FV10/34FV15 Only)	
16	⚠1-790-317-21	CORD, AC POWER (WITH CONNECTOR) (KV-32FS10/32FV15/32XBR250/34FV15T Only)	
17 *	4-068-988-01	BAFFLE, SPEAKER	
18	1-529-336-11	SPEAKER (1-WAY) (KV-32FS10/32FV15/34FV15K/34FV15T Only)	
18	1-529-358-11	SPEAKER (2-WAY) (KV-32XBR250/34FV10/34FV15/34FV15C/34FX250C Only)	
19 *	4-068-987-01	BOX, SPEAKER	
20	4-069-000-01	COVER, REAR (KV-32FV15/32XBR250/34FV15T/34FX250C Only)	
20	4-069-000-21	COVER, REAR (KV-32FS10/34FV10/34FV15,34FV15C/34FV15K Only)	

The components identified by shading and "⚠" are critical for safety. Replace only with specified part number.

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

7-2. CHASSIS (KV-36FS10/36FV15/36XBR250/38FV15K/38FX250/38FX250C/38FX250T)

■	7-682-566-04	SCREW (M4X20), TAPPING, (+-)(BV) (KV-36FV15, 36XBR250, 38FV15K, 38FX250, 38FX250C, 38FX250T ONLY)
☐	7-685-648-79	SCREW (3X12, TYPE 2)
●	7-685-663-79	SCREW (4X16, TYPE 2)
○	7-685-871-01	SCREW (3X6) (S) (KV-36XBR250, 38FX250, 38FX250C 38FX250T ONLY)

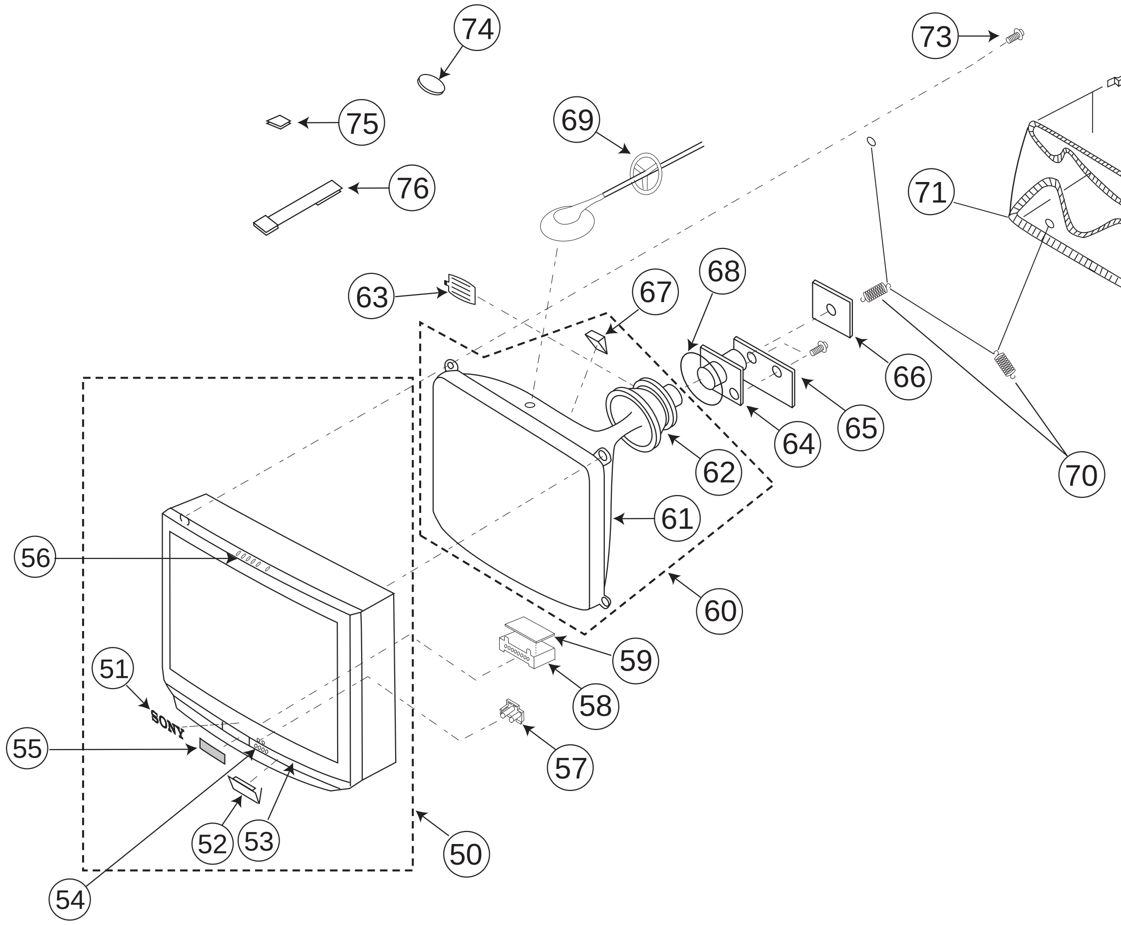


REF.NO.	PART NO.	DESCRIPTION	REMARK
1	* A-1372-634-A	HA BOARD, COMPLETE	
2	* A-1372-635-A	HB BOARD, COMPLETE	
3	* A-1372-636-A	HX BOARD, COMPLETE	
4	* A-1298-961-A	A BOARD, COMPLETE (KV-36FS10/36FV15/ 36XBR250/38FX250/38FX250C Only)	
4	* A-1298-993-A	A BOARD, COMPLETE (KV-38FV15K Only)	
4	* A-1298-994-A	A BOARD, COMPLETE (KV-38FX250T Only)	
5 ⚠	8-598-431-00	TUNER, FSS BTF-WA411 (KV-36FS10/36FV15/ 36XBR250/38FX250/38FX250C Only	
5 ⚠	8-598-475-00	TUNER, FSS BTF-WL411 (KV-38FV15K Only)	
5 ⚠	8-598-477-00	TUNER, FSS BTF-WG411 (KV-38FX250T Only)	
6 ⚠	1-453-286-11	FBT ASSY, NX4600//X4C4	
7	* A-1298-956-A	AK BOARD, COMPLETE (KV-36FS10 Only)	
7	* A-1298-957-A	AK BOARD, COMPLETE (KV-36FV15/ 38FV15K Only)	
7	* A-1298-980-A	AK BOARD, COMPLETE (KV-36XBR250/ 38FX250/38FX250C/38FX250T Only)	
8	* A-1394-934-A	T BOARD, COMPLETE (KV-36XBR250/ 38FX250/38FX250C/38FX250T Only)	
9 ⚠	8-598-430-00	TUNER, FSS BTF-FA401	
10	1-557-056-31	CABLE, P-P (KV-36FV15/36XBR250/38FV15K/ 38FX250/38FX250C/38FX250T Only)	
11	1-556-945-21	CABLE, P-P (KV-36FV15/36XBR250/38FV15K/ 38FX250/38FX250C/38FX250T Only)	
12	8-598-414-10	ANTENNA CHANGER AS-2F (KV-36FV15/ 36XBR250/38FV15K/38FX250/38FX250C/ 38FX250T Only)	
13	* A-1394-938-A	UY BOARD, COMPLETE (KV-36FS10 Only)	
13	* A-1394-943-A	UY BOARD, COMPLETE (KV-36FV15 Only)	
13	* A-1394-944-A	UY BOARD, COMPLETE (KV-38FV15K Only)	
13	* A-1394-947-A	UX BOARD, COMPLETE (KV-36XBR250 Only)	
13	* A-1394-948-A	UX BOARD, COMPLETE (KV-38FX250/38FX250C/38FX250T Only)	
14	3-696-606-02	HINGE, VI	
15	* A-1316-397-A	G BOARD, COMPLETE (KV-36FS10/ 36FV15/36XBR250 Only)	
15	* A-1316-423-A	G BOARD, COMPLETE (KV-38FX250T Only)	
15	* A-1316-470-A	GA BOARD, COMPLETE (KV-38FV15K/38FX250/38FX250C Only)	
16	⚠1-769-796-71	CORD, POWER (WITH CONNECTOR) (KV-38FX250/38FX250C Only)	
16	⚠1-775-468-11	CORD, POWER (WITH CONNECTOR) (KV-38FV15K Only)	
16	⚠1-790-317-21	CORD, AC POWER (WITH CONNECTOR) (KV-36FS10/36FV15/36XBR250/38FX250T Only)	
17	* 4-068-988-01	BAFFLE, SPEAKER	
18	1-529-336-11	SPEAKER (1-WAY) (KV-36FS10/ 36FV15/38FV15K Only)	
18	1-529-358-11	SPEAKER (2-WAY) (KV-36XBR250/ 38FX250/38FX250C/38FX250T Only)	
19	* 4-068-987-01	BOX, SPEAKER	
20	4-068-998-01	COVER, REAR (KV-36FS10/36FV15/36XBR250, 38FV15K/38FX250/38FX250C/38FX250T Only)	

The components identified by shading and "⚠" mark are critical for safety. Replace only with specified part number.

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

7-3. PICTURE TUBE



REF.NO.	PART NO.	DESCRIPTION	REMARK
50	X-4036-678-2	BEZNET ASSY (KV-32FS10 Only)	51-53
50	X-4036-679-1	BEZNET ASSY (KV-32FV15/34FV15T Only)	51-53
50	X-4036-679-2	BEZNET ASSY (KV-34FV10/34FV15/34FV15C/34FV15K Only)	51-53
50	X-4036-680-1	BEZNET ASSY (KV-32XBR250/34FX250C Only)	51-53
50	X-4036-683-1	BEZNET ASSY (KV-36FS10 Only)	51-53
50	X-4036-684-1	BEZNET ASSY 36FV15/38FV15K Only)	51-53
50	X-4036-685-1	BEZNET ASSY (KV-36XBR250/38FX250/38FX250C, 38FX250T Only)	51-53
51	3-704-179-31	EMBLEM (NO. 9), SONY	
52	4-068-985-01	DOOR	
53	3-703-574-00	RETAINER, DOOR	
54	4-068-984-01	MULTI-BUTTON (BOTTOM)	
55	4-068-991-01	PANEL, IR (KV-32XBR250/34FX250C/36XBR250, 38FX250/38FX250C/38FX250T Only)	
56	4-068-982-01	MULTI-BUTTON (TOP)	
57	* 4-068-986-01	GUIDE, LED	
58	4-068-992-01	CASE, IR SHIELD (KV-32XBR250/34FX250C/36XBR250, 38FX250/38FX250C/38FX250T Only)	
59	4-071-399-01	CUSHION, 45MM X 100MM (KV-36XBR250/38FX250/38FX250C/38FX250T Only)	
60⚠	8-735-047-61	ITC 34RSN-A1 (KV-32FV15/32XBR250 Only)	61-62
60⚠	8-735-050-61	ITC 34RSN-A1E (KV-34FX250C ONLY)	61-62
60⚠	8-735-048-61	ITC 38RSN-A1 (KV-36FS10/36FV15/36XBR250/38FV15K/38FX250/38FX250T Only)	61-62

The components identified by shading and "⚠" mark are critical for safety. Replace only with specified part number.

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

REF.NO.	PART NO.	DESCRIPTION	REMARK
60⚠	8-735-080-61	ITC 38RSN-A1E (KV-38FX250C Only)	61-62
61⚠	8-735-047-05	CRT 34RSN (KV-32FS10/34FV10/34FV15/34FV15C/34FV15K/34FV15T Only)	
62 ⚠	8-451-499-21	DY Y34RSA-X (KV-32FS10/34FV10/34FV15/34FV15C/34FV15K/34FV15T Only)	
63	2-163-920-01	PLATE, TLH CORRECTION (KV-32FS10/34FV10/34FV15/34FV15C/34FV15K/34FV15T Only)	
64 ⚠	8-453-007-41	NA324-M4 (KV-32FS10/34FV10/34FV15/34FV15C/34FV15K/34FV15T Only)	
65	* A-1375-187-A	WA BOARD, MOUNTED (KV-32FS10/32FV15/32XBR250/34FV10/34FV15/34FV15K/34FV15T/34FX250C Only)	
65	* A-1375-191-A	WA BOARD, MOUNTED (KV-36FS10/36FV15/36XBR250/36XBR250C/38FV15K/38FX250/38FX250C/38FX250T Only)	
66	*A-1331-942-A	C BOARD, COMPLETE	
67	4-053-005-01	SPACER, DY (KV-32FS10/34FV10/34FV15/34FV15C/34FV15K/34FV15T Only)	
68	1-452-896-11	COIL, NA ROTATION (KV-32FS10/34FV15/34FV15C/34FV15K/34FV15T Only)	

REF.NO.	PART NO.	DESCRIPTION	REMARK
69	3-704-372-31	HOLDER, HV CABLE	
70	4-036-329-01	SPRING (B), TENSION	
71 ⚠	1-419-163-11	COIL, DEMAGNETIZATION (KV-34FV10/34FV15/34FV15C/34FV15K/34FX250C Only)	
71 ⚠	1-419-193-11	COIL, DEMAGNETIZATION (KV-38FV15K/38FX250/38FX250C Only)	
71 ⚠	1-416-827-11	COIL, DEMAGNETIZATION (KV-32FS10/32FV15/32XBR250/34FV15T Only)	
71 ⚠	1-416-828-11	COIL, DEMAGNETIZATION (KV-36FS10/36FV15/36XBR250/38FX250T Only)	
72	4-065-895-02	HOLDER, DGC	
73	4-046-765-01	SCREW, TAPPING (7) +CROWN WASHER	
74	1-452-094-00	DISC, CIRCULAR (KV-32FS10/34FV10/34FV15/34FV15C/34FV15K/34FV15T Only)	
75	1-452-032-00	MAGNET, DISC (KV-32FS10/34FV10/34FV15/34FV15C, 34FV15K/34FV15T Only)	
76	4-062-047-01	PIECE A (110), CONV CORRECT (KV-32FS10/34FV10/34FV15/34FV15C/34FV15K/34FV15T Only)	

SECTION 8
ELECTRICAL PARTS LIST

PARTS LISTING TABLE OF CONTENTS

Page

A BOARD COMPLETE PARTS LIST: (All Models) 85

AK BOARD COMMON PARTS LIST: Parts common to all models listed in this manual 92

AK BOARD VARIANT PARTS LIST: Parts that belong only to the model specified 95

Refer to the designated variant parts list when seeking a part indicated by an asterisk (*) on the A board schematic or by the word "variant" on the common parts list.

Model	Page
KV-32FV15/34FV15/34FV15C/34FV15K/34FV15T/36FV15/38FV15K	95
KV-32XBR250/34FX250C/36XBR250/38FX250/38FX250C/38FX250T	96

C BOARD COMPLETE PARTS LIST (All Models) 97

G BOARD COMPLETE PARTS LIST (KV-32FS10/32FV15/32XBR250/34FV15T/36FS10/36FV15/36XBR250/38FX250T only) 97

GA BOARD COMPLETE PARTS LIST (KV-34FV10/34FV15/34FV15C/34FV15K/34FX250C/38FX250/38FX250C/38FV15K only) 100

HA BOARD COMPLETE PARTS LIST (All Models) 103

HB BOARD COMPLETE PARTS LIST (All Models) 103

HX BOARD COMPLETE PARTS LIST (All Models) 103

T BOARD COMPLETE PARTS LIST (KV-32XBR250/34FX250C/36XBR250/38FX250/38FX250C/38FX250T only) 104

UX BOARD MAIN PARTS LIST (KV-32XBR250/34FX250C/36XBR250/38FX250/38FX250C/38FX250T only) 106

UX BOARD PIP PARTS LIST (KV-32XBR250/34FX250C/36XBR250/38FX250/38FX250C/38FX250T only) 112

UY BOARD MAIN PARTS LIST (32FS10/32FV15/34FV10/34FV15/34FV15C/34FV15K/34FV15T/36FS10/36FV15/38FV15K only) 114

UY BOARD PIP PARTS LIST (32FS10/32FV15/34FV10/34FV15/34FV15C/34FV15K/34FV15T/36FS10/36FV15/38FV15K only) 119

WA BOARD COMPLETE PARTS LIST (All Models) 121

ACCESSORIES AND PACKING MATERIAL 123

REMOTE COMMANDER 123

NOTES:

SECTION 8
ELECTRICAL PARTS LIST

Note:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note:

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components identified by ⧓ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

- Items marked with a asterisk " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS
- All resistors are in ohms
- F : nonflammable

When indicating parts by reference number, please include the board name.

A

***A-1298-890-A A BOARD, COMPLETE**
(KV-32FS10/32FV15/32XBR250/34FV10/34FV15/34FV15C/34FX250C only)
***A-1298-961-A A BOARD, COMPLETE**
(KV-36FS10/36FV15/36XBR250/38FX250/38FX250C only)
***A-1298-965-A A BOARD, COMPLETE (KV-34FV15T only)**
***A-1298-969-A A BOARD, COMPLETE (KV-34FV15K only)**
***A-1298-993-A A BOARD, COMPLETE (KV-38FV15K only)**
***A-1298-994-A A BOARD, COMPLETE (KV-38FX250T only)**

4-382-854-11 SCREW (M3X10), P, SW (+)

CAPACITOR

REF.NO.	PART NO.	DESCRIPTION			REMARK
C001	1-163-259-91	CERAMIC CHIP	220pF	5%	50V
C003	1-163-809-11	CERAMIC CHIP	0.047µF	10%	25V
C005	1-126-960-11	ELECT	1µF	20%	50V
C009	1-104-664-11	ELECT	47µF	20%	25V
C010	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
C012	1-163-010-11	CERAMIC CHIP	0.0012µF	10%	50V
C013	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C014	1-163-017-00	CERAMIC CHIP	0.0047µF	10%	50V
C023	1-163-259-91	CERAMIC CHIP	220pF	5%	50V
C028	1-163-227-11	CERAMIC CHIP	10pF	0.5pF	50V
C029	1-163-227-11	CERAMIC CHIP	10pF	0.5pF	50V
C035	1-163-237-11	CERAMIC CHIP	27pF	5%	50V
C036	1-163-231-11	CERAMIC CHIP	15pF	5%	50V
C037	1-163-243-11	CERAMIC CHIP	47pF	5%	50V
C038	1-163-243-11	CERAMIC CHIP	47pF	5%	50V
C039	1-163-243-11	CERAMIC CHIP	47pF	5%	50V
C040	1-163-243-11	CERAMIC CHIP	47pF	5%	50V
C051	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C053	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C056	1-163-243-11	CERAMIC CHIP	47pF	5%	50V
C061	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
C062	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
C063	1-126-941-11	ELECT	470µF	20%	25V
C068	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C071	1-164-096-11	CERAMIC	0.01µF		50V
C072	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C075	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C301	1-136-165-00	FILM	0.1µF	5%	50V
C306	1-163-233-11	CERAMIC CHIP	18pF	5%	50V
C308	1-163-005-11	CERAMIC CHIP	470pF	10%	50V
C309	1-126-959-11	ELECT	0.47µF	20%	50V
C310	1-104-664-11	ELECT	47µF	20%	25V
C311	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C312	1-126-963-11	ELECT	4.7µF	20%	50V
C314	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C316	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C318	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C319	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C320	1-126-935-11	ELECT	470µF	20%	16V
C321	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C322	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C323	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C326	1-165-319-11	CERAMIC CHIP	0.1µF		50V
C327	1-126-963-11	ELECT	4.7µF	20%	50V
C329	1-165-319-11	CERAMIC CHIP	0.1µF		50V
C331	1-126-964-11	ELECT	10µF	20%	50V
C332	1-126-960-11	ELECT	1µF	20%	50V
C333	1-102-129-00	CERAMIC	0.01µF	10%	50V
C334	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C336	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C338	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C339	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C340	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C343	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C344	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C345	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C351	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C352	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C355	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C357	1-126-967-11	ELECT	47µF	20%	50V
C359	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C361	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C374	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C375	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C382	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C384	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C393	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C394	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C395	1-104-664-11	ELECT	47µF	20%	25V

A COMPLETE PARTS LISTING

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

REF.NO.	PART NO.	DESCRIPTION			REMARK
C396	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C397	1-104-664-11	ELECT	47µF	20%	25V
C398	1-126-961-11	ELECT	2.2µF	20%	50V
C501	1-102-110-00	CERAMIC	220pF	10%	50V
C502	1-126-959-11	ELECT	0.47µF	20%	50V
C503	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C504	1-102-228-00	CERAMIC	470pF	10%	500V
C505	1-102-228-00	CERAMIC	470pF	10%	500V
C506	1-106-383-00	MYLAR	0.047µF	10%	200V
C507 ⚠	1-162-116-00	CERAMIC	680pF	10%	2KV
C508	1-102-228-00	CERAMIC	470pF	10%	500V
C509	1-162-116-00	CERAMIC	680pF	10%	2KV
C510	1-137-150-11	MYLAR	0.01µF	10%	100V
C511 ⚠	1-117-652-11	FILM	22000pF	3%	2KV
C512	1-129-928-00	FILM	0.0027µF	10%	630V
C513 ⚠	1-130-118-00	FILM	0.051µF	5%	400V
C514 ⚠	1-115-521-11	FILM	0.82µF	5%	250V
C515	1-106-343-00	MYLAR	0.001µF	10%	100V
C516	1-136-540-11	FILM	0.82µF	5%	200V
C517	1-107-649-11	ELECT	2.2µF	20%	250V
C518	1-106-387-00	MYLAR	0.068µF	10%	200V
C519	1-107-612-11	CERAMIC	100pF	5%	500V
C520	1-164-646-11	CERAMIC	2200pF	10%	500V
C521	1-163-010-11	CERAMIC CHIP	0.0012µF	10%	50V
C522	1-126-960-11	ELECT	1µF	20%	50V
C525	1-102-244-00	CERAMIC	220pF	10%	500V
C526	1-107-662-11	ELECT	22µF	20%	250V
C527	1-162-116-00	CERAMIC	680pF	10%	2KV
C528	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C529	1-128-551-11	ELECT	22µF	20%	25V
C530	1-137-366-11	FILM	0.0022µF	5%	50V
C531	1-126-965-11	ELECT	22µF	20%	50V
C532	1-126-965-11	ELECT	22µF	20%	50V
C534	1-126-967-11	ELECT	47µF	20%	50V
C537	1-126-941-11	ELECT	470µF	20%	25V
C539	1-126-941-11	ELECT	470µF	20%	25V
C540	1-107-995-11	ELECT	100µF	0	160V
C541	1-128-560-11	ELECT	22µF	20%	100V
C543	1-104-666-11	ELECT	220µF	20%	25V
C544	1-129-718-00	FILM	0.022µF	5%	630V
C545	1-106-387-00	MYLAR	0.068µF	10%	200V
C546	1-106-343-00	MYLAR	0.001µF	10%	100V
C547	1-106-343-00	MYLAR	0.001µF	10%	100V
C548	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C549	1-106-375-12	MYLAR	0.022µF	20%	200V
C550	1-102-002-00	CERAMIC	680pF	10%	500V
C551	1-109-954-11	ELECT	0.47µF	20%	160V
C552	1-102-244-00	CERAMIC	220pF	10%	500V
C553	1-117-665-11	FILM	0.33µF	5%	250V
C554 ⚠	1-104-491-11	FILM	0.0047µF	3%	2KV
C561	1-126-967-11	ELECT	47µF	20%	50V
C563	1-104-666-11	ELECT	220µF	20%	25V
C564	1-126-960-11	ELECT	1µF	20%	50V

REF.NO.	PART NO.	DESCRIPTION			REMARK
C565	1-126-969-11	ELECT	220µF	20%	50V
C568	1-136-169-00	FILM	0.22µF	5%	50V
C571	1-126-942-61	ELECT	1000µF	20%	25V
C572	1-126-942-61	ELECT	1000µF	20%	25V
C1002	1-126-964-11	ELECT	10µF	20%	50V
C1003	1-126-961-11	ELECT	2.2µF	20%	50V
C1004	1-126-960-11	ELECT	1µF	20%	50V
C1101	1-126-943-11	ELECT	2200µF	20%	25V
C1103	1-126-965-11	ELECT	22µF	20%	50V
C1104	1-104-664-11	ELECT	47µF	20%	25V
C1105	1-104-664-11	ELECT	47µF	20%	25V
C1106	1-126-964-11	ELECT	10µF	20%	50V
C1107	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
C1108	1-128-551-11	ELECT	22µF	20%	25V
C1109	1-126-964-11	ELECT	10µF	20%	50V
C1110	1-163-227-11	CERAMIC CHIP	10pF	0.5pF	50V
C1111	1-163-227-11	CERAMIC CHIP	10pF	0.5pF	50V
C1112	1-163-227-11	CERAMIC CHIP	10pF	0.5pF	50V
C1117	1-126-960-11	ELECT	1µF	20%	50V
C1118	1-126-960-11	ELECT	1µF	20%	50V
C1355	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C1356	1-126-964-11	ELECT1	10µF	20%	50V
C1357	1-164-005-11	CERAMIC CHIP	0.47µF		16V
C1358	1-126-940-11	ELECT	330µF	20%	25V
C1359	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1360	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C1361	1-163-241-11	CERAMIC CHIP	39pF	5%	50V
C1362	1-163-017-00	CERAMIC CHIP	0.0047µF	10%	50V
C1363	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C1367	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1369	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1370	1-126-964-11	ELECT	10µF	20%	50V
C1371	1-163-017-00	CERAMIC CHIP	0.0047µF	10%	50V
C1372	1-163-017-00	CERAMIC CHIP	0.0047µF	10%	50V
C1373	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C1501 ⚠	1-107-846-11	FILM	0.1µF	5%	250V

CONNECTOR

REF.NO.	PART NO.	DESCRIPTION	REMARK
CN270 *	1-691-616-21	CONNECTOR, BOARD TO BOARD	15P
CN271 *	1-691-616-21	CONNECTOR, BOARD TO BOARD	15P
CN272 *	1-691-616-21	CONNECTOR, BOARD TO BOARD	15P
CN351 *	1-564-509-11	PLUG, CONNECTOR	6P
CN501 *	1-580-798-11	CONNECTOR PIN (DY)	6P
CN503 *	1-564-508-11	PLUG, CONNECTOR	5P
CN1001*	1-564-508-11	PLUG, CONNECTOR	5P
CN1002*	1-564-506-11	PLUG, CONNECTOR	3P
CN1101*	1-564-515-11	PLUG, CONNECTOR	12P
CN1102*	1-564-507-11	PLUG, CONNECTOR	4P
CN1231*	1-564-512-11	PLUG, CONNECTOR	9P
CN1641*	1-564-515-11	PLUG, CONNECTOR	12P
CN1643	1-695-915-11	TAB (CONTACT)	
CN1941*	1-564-511-11	PLUG, CONNECTOR	8P
CN1942*	1-564-508-11	PLUG, CONNECTOR	5P

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

COMPLETE PARTS LISTING

A

DIODE

REF.NO.	PART NO.	DESCRIPTION	REMARK
D001	8-719-991-33	DIODE 1SS133T-77	
D002	8-719-109-89	DIODE RD5.6ESB2	
D003	8-719-991-33	DIODE 1SS133T-77	
D004	8-719-110-17	DIODE RD10ESB2	
D011	8-719-109-72	DIODE RD3.9ESB2	
D012	8-719-991-33	DIODE 1SS133T-77	
D013	8-719-991-33	DIODE 1SS133T-77	
D014	8-719-991-33	DIODE 1SS133T-77	
D015	8-719-991-33	DIODE 1SS133T-77	
D016	8-719-991-33	DIODE 1SS133T-77	
D018	8-719-404-50	DIODE MA111-TX	
D019	8-719-404-50	DIODE MA111-TX	
D301	8-719-404-50	DIODE MA111-TX	
D302	8-719-991-33	DIODE 1SS133T-77	
D303	8-719-921-44	DIODE MTZJ-5.1C	
D368	8-719-991-33	DIODE 1SS133T-77	
D384	8-719-921-80	DIODE MTZJ-11B	
D388	8-719-921-80	DIODE MTZJ-11B	
D501	8-719-109-89	DIODE RD5.6ESB2	
D502	8-719-945-80	DIODE ERC06-15S	
D503⚠	8-719-945-80	DIODE ERC06-15S	
D504	8-719-900-26	DIODE ERD29-08J	
D505	8-719-908-03	DIODE GP08D	
D506	8-719-908-03	DIODE GP08D	
D507	8-719-991-33	DIODE 1SS133T-77	
D510	8-719-300-33	DIODE RU-3AM	
D511	8-719-970-87	DIODE ERA38-06	
D512	8-719-970-87	DIODE ERA38-06	
D513	8-719-110-41	DIODE RD15ESB2	
D515⚠	8-719-302-43	DIODE EL1Z	
D516	8-719-991-33	DIODE 1SS133T-77	
D518	8-719-991-33	DIODE 1SS133T-77	
D519⚠	8-719-302-43	DIODE EL1Z	
D520	8-719-991-33	DIODE 1SS133T-77	
D521	8-719-921-63	DIODE MTZJ-7.5B	
D522	8-719-991-33	DIODE 1SS133T-77	
D523	8-719-109-69	DIODE MTZJ-T-77-3.6B	
D524	8-719-109-97	DIODE MTZJ-T-77-6.8B	
D530⚠	8-719-979-85	DIODE EGP20G	
D531	8-719-979-85	DIODE EGP20G	
D534	8-719-302-43	DIODE EL1Z	
D535	8-719-404-50	DIODE MA111-TX	
D536	1-216-295-91	SHORT	
D561	8-719-908-03	DIODE GP08D	
D1003	8-719-110-17	DIODE RD10ESB2	
D1004	8-719-110-17	DIODE RD10ESB2	
D1101	8-719-110-17	DIODE RD10ESB2	
D1102	8-719-982-24	DIODE MTZJ-T-77-33A	
D1103	8-719-109-89	DIODE RD5.6ESB2	
D1104	8-719-110-17	DIODE RD10ESB2	
D1301	8-719-404-50	DIODE MA111-TX	
D1302	8-719-991-33	DIODE 1SS133T-77	
D1303	8-719-404-50	DIODE MA111-TX	
D1304	8-719-404-50	DIODE MA111-TX	
D1305	8-719-404-50	DIODE MA111-TX	
D1306	8-719-404-50	DIODE MA111-TX	

FERRITE BEAD

REF.NO.	PART NO.	DESCRIPTION	REMARK
FB501	1-410-397-21	FERRITE 1.1µH	
FB502	1-410-397-21	FERRITE 1.1µH	
FB503	1-410-397-21	FERRITE 1.1µH	

IC

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC001	8-752-903-74	IC CXP85856A-024Q	
IC002	8-759-527-76	IC M24C08-MN6T	
IC351	8-759-710-86	IC NJM2233BM	
IC352	8-752-080-75	IC CXA2039M-T6	
IC353	8-759-462-91	IC TA1226N	
IC354	8-752-082-49	IC CXA2119M	
IC355	8-752-088-86	IC CXA2131S	
IC501	8-759-700-07	IC NJM2903M	
IC561⚠	8-759-192-71	IC STV9379	
IC1001	8-752-058-68	IC CXA1315M	

CHIP CONDUCTOR

REF.NO.	PART NO.	DESCRIPTION	REMARK
JR001	1-216-295-91	SHORT	
JR002	1-216-295-91	SHORT	
JR003	1-216-295-91	SHORT	
JR004	1-216-049-91	RES, CHIP 1K 5% 1/10W	
JR051	1-216-295-91	SHORT	
JR053	1-216-295-91	SHORT	
JR054	1-216-295-91	SHORT	
JR4120	1-216-295-91	SHORT	

COIL

REF.NO.	PART NO.	DESCRIPTION	REMARK
L001	1-414-857-11	INDUCTOR 100µH	
L002	1-414-857-11	INDUCTOR 100µH	
L003	1-414-856-11	INDUCTOR 10µH	
L004	1-414-856-11	INDUCTOR 10µH	
L301	1-414-857-11	INDUCTOR 100µH	
L302	1-414-856-11	INDUCTOR 10µH	
L351	1-414-186-31	INDUCTOR 33µH	
L501	1-406-677-11	INDUCTOR 10mH	
L502	1-412-552-11	INDUCTOR 2.2mH	
L503	1-406-677-11	INDUCTOR 10mH	
L504	1-406-677-11	INDUCTOR 10mH	
L505	1-406-976-11	INDUCTOR 68µH	
L511	1-411-189-11	INDUCTOR 15mH	
L517	1-412-552-11	INDUCTOR 2.2mH	
L1101	1-414-857-11	INDUCTOR 100µH	
L1102	1-414-856-11	INDUCTOR 10µH	
L1351	1-414-856-11	INDUCTOR 10µH	
L1352	1-412-756-21	INDUCTOR 56µH	

A COMPLETE PARTS LISTING

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

TRANSISTOR

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q001	8-729-216-22	TRANSISTOR 2SA1162-G	
Q002	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q003	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q004	8-729-216-22	TRANSISTOR 2SA1162-G	
Q005	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q006	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q007	8-729-216-22	TRANSISTOR 2SA1162-G	
Q010	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q011	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q012	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q013	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q014	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q015	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q016	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q017	8-729-216-22	TRANSISTOR 2SA1162-G	
Q103	8-729-216-22	TRANSISTOR 2SA1162-G	
Q104	8-729-216-22	TRANSISTOR 2SA1162-G	
Q301	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q303	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q304	8-729-216-22	TRANSISTOR 2SA1162-G	
Q305	8-729-216-22	TRANSISTOR 2SA1162-G	
Q306	8-729-216-22	TRANSISTOR 2SA1162-G	
Q307	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q310	8-729-216-22	TRANSISTOR 2SA1162-G	
Q311	8-729-216-22	TRANSISTOR 2SA1162-G	
Q313	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q314	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q351	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q352	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q359	8-729-216-22	TRANSISTOR 2SA1162-G	
Q361	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q362	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q364	8-729-216-22	TRANSISTOR 2SA1162-G	
Q369	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q370	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q501	8-729-140-50	TRANSISTOR 2SC3209LK	
Q502 ⚠	8-729-045-26	TRANSISTOR 2SD2580-CA	
Q503	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q504	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q507	8-729-043-95	TRANSISTOR 2SC3840(3)	
Q511 ⚠	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q512 ⚠	8-729-809-29	TRANSISTOR 2SC4159-E	
Q561	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q562	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1102	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1103	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1301	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1302	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1303	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1352	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1353	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1354	8-729-422-27	TRANSISTOR 2SD601A-Q	

RESISTOR

REF.NO.	PART NO.	DESCRIPTION			REMARK
R001	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R002	1-216-049-91	RES, CHIP	1K	5%	1/10W
R003	1-216-097-91	RES, CHIP	100K	5%	1/10W
R004	1-216-121-91	RES, CHIP	1M	5%	1/10W
R006	1-247-815-91	CARBON	220	5%	1/4W
R007	1-216-073-00	RES, CHIP	10K	5%	1/10W
R008	1-247-815-91	CARBON	220	5%	1/4W
R009	1-216-073-00	RES, CHIP	10K	5%	1/10W
R010	1-216-041-00	RES, CHIP	470	5%	1/10W
R011	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R012	1-216-033-00	RES, CHIP	220	5%	1/10W
R013	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R014	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R015	1-216-073-00	RES, CHIP	10K	5%	1/10W
R016	1-216-073-00	RES, CHIP	10K	5%	1/10W
R019	1-249-425-11	CARBON	4.7K	5%	1/4W
R020	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R022	1-249-429-11	CARBON	10K	5%	1/4W
R023	1-216-089-91	RES, CHIP	47K	5%	1/10W
R025	1-216-033-00	RES, CHIP	220	5%	1/10W
R026	1-216-121-91	RES, CHIP	1M	5%	1/10W
R027	1-216-049-91	RES, CHIP	1K	5%	1/10W
R028	1-249-429-11	CARBON	10K	5%	1/4W
R029	1-216-025-91	RES, CHIP	100	5%	1/10W
R030	1-249-425-11	CARBON	4.7K	5%	1/4W
R031	1-247-815-91	CARBON	220	5%	1/4W
R032	1-216-033-00	RES, CHIP	220	5%	1/10W
R036	1-216-049-91	RES, CHIP	1K	5%	1/10W
R037	1-216-049-91	RES, CHIP	1K	5%	1/10W
R038	1-216-049-91	RES, CHIP	1K	5%	1/10W
R039	1-247-807-31	CARBON	100	5%	1/4W
R040	1-247-815-91	CARBON	220	5%	1/4W
R041	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R042	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R043	1-216-033-00	RES, CHIP	220	5%	1/10W
R044	1-216-049-91	RES, CHIP	1K	5%	1/10W
R045	1-247-815-91	CARBON	220	5%	1/4W
R046	1-247-815-91	CARBON	220	5%	1/4W
R047	1-249-417-11	CARBON	1K	5%	1/4W
R048	1-249-417-11	CARBON	1K	5%	1/4W
R049	1-249-417-11	CARBON	1K	5%	1/4W
R050	1-247-815-91	CARBON	220	5%	1/4W
R051	1-247-815-91	CARBON	220	5%	1/4W
R052	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R053	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R054	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R055	1-216-097-91	RES, CHIP	100K	5%	1/10W
R056	1-216-033-00	RES, CHIP	220	5%	1/10W
R057	1-249-417-11	CARBON	1K	5%	1/4W
R058	1-216-041-00	RES, CHIP	470	5%	1/10W
R060	1-216-073-00	RES, CHIP	10K	5%	1/10W
R061	1-216-073-00	RES, CHIP	10K	5%	1/10W

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

COMPLETE PARTS LISTING

A

REF.NO.	PART NO.	DESCRIPTION			REMARK	
R062	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R063	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R064	1-247-815-91	CARBON	220	5%	1/4W	
R065	1-247-815-91	CARBON	220	5%	1/4W	
R066	1-247-815-91	CARBON	220	5%	1/4W	
R067	1-249-413-11	CARBON	470	5%	1/4W	
R068	1-247-815-91	CARBON	220	5%	1/4W	
R069	1-247-815-91	CARBON	220	5%	1/4W	
R070	1-249-421-11	CARBON	2.2K	5%	1/4W	
R071	1-247-815-91	CARBON	220	5%	1/4W	
R072	1-216-033-00	RES, CHIP	220	5%	1/10W	
R073	1-216-033-00	RES, CHIP	220	5%	1/10W	
R074	1-216-033-00	RES, CHIP	220	5%	1/10W	
R075	1-216-033-00	RES, CHIP	220	5%	1/10W	
R076	1-216-033-00	RES, CHIP	220	5%	1/10W	
R077	1-216-033-00	RES, CHIP	220	5%	1/10W	
R078	1-249-417-11	CARBON	1K	5%	1/4W	
R079	1-216-033-00	RES, CHIP	220	5%	1/10W	
R080	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	
R081	1-216-025-91	RES, CHIP	100	5%	1/10W	
R082	1-216-025-91	RES, CHIP	100	5%	1/10W	
R083	1-249-429-11	CARBON	10K	5%	1/4W	
R084	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R085	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	
R086	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R087	1-247-815-91	CARBON	220	5%	1/4W	
R089	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R090	1-216-033-00	RES, CHIP	220	5%	1/10W	
R092	1-249-429-11	CARBON	10K	5%	1/4W	
R093	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	
R096	1-216-033-00	RES, CHIP	220	5%	1/10W	
R097	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	
R099	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	
R106	1-216-081-00	RES, CHIP	22K	5%	1/10W	
R107	1-216-081-00	RES, CHIP	22K	5%	1/10W	
R108	1-216-081-00	RES, CHIP	22K	5%	1/10W	
R109	1-216-081-00	RES, CHIP	22K	5%	1/10W	
R131	1-216-037-00	RES, CHIP	330	5%	1/10W	
R132	1-216-113-00	RES, CHIP	470K	5%	1/10W	
R133	1-216-037-00	RES, CHIP	330	5%	1/10W	
R135	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R136	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R137	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R304	1-216-033-00	RES, CHIP	220	5%	1/10W	
R305	1-247-815-91	CARBON	220	5%	1/4W	
R306	1-247-815-91	CARBON	220	5%	1/4W	
R307	1-216-295-91	SHORT				
R309	1-216-295-91	SHORT				
R311	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R313	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	
R314	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R315	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R316	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R319	1-216-057-00	RES, CHIP	2.2K	5%	1/10W	
R320	1-216-057-00	RES, CHIP	2.2K	5%	1/10W	

REF.NO.	PART NO.	DESCRIPTION			REMARK	
R321	1-216-057-00	RES, CHIP	2.2K	5%	1/10W	
R324	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R325	1-216-033-00	RES, CHIP	220	5%	1/10W	
R326	1-216-085-00	RES, CHIP	33K	5%	1/10W	
R327	1-216-033-00	RES, CHIP	220	5%	1/10W	
R330	1-208-806-11	RES, CHIP	10K	0.50%	1/10W	
R331	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	
R332	1-216-033-00	RES, CHIP	220	5%	1/10W	
R334	1-216-033-00	RES, CHIP	220	5%	1/10W	
R335	1-216-033-00	RES, CHIP	220	5%	1/10W	
R336	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R337	1-216-347-11	METAL OXIDE	0.68	5%	1W	F
R340	1-216-105-91	RES, CHIP	220K	5%	1/10W	
R341	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R342	1-216-097-91	RES, CHIP	100K	5%	1/10W	
R343	1-216-093-91	RES, CHIP	68K	5%	1/10W	
R344	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R346	1-216-023-00	RES, CHIP	82	5%	1/10W	
R347	1-216-041-00	RES, CHIP	470	5%	1/10W	
R348	1-216-033-00	RES, CHIP	220	5%	1/10W	
R349	1-216-041-00	RES, CHIP	470	5%	1/10W	
R350	1-247-807-31	CARBON	100	5%	1/4W	
R352	1-208-803-11	RES, CHIP	7.5K	0.50%	1/10W	
R353	1-216-295-91	SHORT				
R354	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R355	1-216-069-00	RES, CHIP	6.8K	5%	1/10W	
R356	1-216-025-91	RES, CHIP	100	5%	1/10W	
R358	1-216-295-91	SHORT				
R359	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R360	1-247-815-91	CARBON	220	5%	1/4W	
R361	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R362	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R370	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R372	1-216-097-91	RES, CHIP	100K	5%	1/10W	
R373	1-216-121-91	RES, CHIP	1M	5%	1/10W	
R374	1-216-041-00	RES, CHIP	470	5%	1/10W	
R375	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R376	1-216-025-91	RES, CHIP	100	5%	1/10W	
R378	1-216-083-00	RES, CHIP	27K	5%	1/10W	
R383	1-216-025-91	RES, CHIP	100	5%	1/10W	
R384	1-216-037-00	RES, CHIP	330	5%	1/10W	
R385	1-249-425-11	CARBON	4.7K	5%	1/4W	
R386	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R387	1-216-037-00	RES, CHIP	330	5%	1/10W	
R398	1-216-095-00	RES, CHIP	82K	5%	1/10W	
R501	1-216-041-00	RES, CHIP	470	5%	1/10W	
R502	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	
R503	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R504	1-216-455-21	METAL OXIDE	560	5%	2W	F
R505	1-247-863-91	CARBON	22K	5%	1/4W	
R506	1-215-861-00	METAL OXIDE	47	5%	1W	F
R507	1-249-401-11	CARBON	47	5%	1/4W	
R508	1-249-425-11	CARBON	4.7K	5%	1/4W	
R509	1-260-328-11	CARBON	1K	5%	1/2W	
R510⚠	1-215-860-11	METAL OXIDE	33	5%	1W	F

A COMPLETE PARTS LISTING

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

The components identified by ⧓ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

REF.NO.	PART NO.	DESCRIPTION			REMARK	
R512	1-215-910-00	METAL OXIDE	68	5%	3W	F
R514	1-216-081-00	RES, CHIP	22K	5%	1/10W	
R515	1-208-812-11	RES, CHIP	18K	0.50%	1/10W	
R516	1-208-790-11	RES, CHIP	2.2K	0.50%	1/10W	
R517	1-249-417-11	CARBON	1K	5%	1/4W	
R518	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R519	1-249-413-11	CARBON	470	5%	1/4W	
R520	1-215-907-11	METAL OXIDE	22	5%	3W	F
R521	1-216-081-00	RES, CHIP	22K	5%	1/10W	
R523	1-208-808-11	RES, CHIP	12K	0.50%	1/10W	
R524	1-249-429-11	CARBON	10K	5%	1/4W	
R525	1-208-804-11	RES, CHIP	8.2K	0.50%	1/10W	
R526	1-215-880-00	METAL OXIDE	10	5%	2W	F
R527	1-216-097-91	RES, CHIP	100K	5%	1/10W	
R528	1-208-814-91	RES, CHIP	22K	0.50%	1/10W	
R529	1-208-814-91	RES, CHIP	22K	0.50%	1/10W	
⧓ R530 ⚠	1-208-808-11	RES, CHIP	12K	0.50%	1/10W	
⧓ R531 ⚠	1-216-091-00	RES, CHIP	56K	5%	1/10W	
R532	1-208-760-11	RES, CHIP	120	0.50%	1/10W	
R533	1-215-902-11	METAL OXIDE	47K	5%	1W	F
R536 ⚠	1-260-288-11	CARBON	0.47	5%	1/2W	
R537 ⚠	1-260-288-11	CARBON	0.47	5%	1/2W	
R538	1-247-887-00	CARBON	220K	5%	1/4W	
R539	1-215-891-11	METAL OXIDE	680	5%	2W	F
R540	1-216-093-91	RES, CHIP	68K	5%	1/10W	
R541	1-215-922-11	METAL OXIDE	6.8K	5%	3W	F
R542	1-215-921-11	METAL OXIDE	4.7K	5%	3W	F
R543 ⚠	1-249-377-11	CARBON	0.47	5%	1/4W	F
R544	1-216-113-00	RES, CHIP	470K	5%	1/10W	
R545 ⚠	1-249-387-11	CARBON	3.3	5%	1/4W	F
R546	1-215-453-00	METAL	22K	1%	1/4W	
R547	1-215-457-00	METAL	33K	1%	1/4W	
R548	1-215-921-11	METAL OXIDE	4.7K	5%	3W	F
R549	1-215-437-00	METAL	4.7K	1%	1/4W	
R550 ⚠	1-249-377-11	CARBON	0.47	5%	1/4W	F
R551	1-215-873-00	METAL OXIDE	4.7K	5%	1W	F
R552	1-216-455-21	METAL OXIDE	560	5%	2W	F
R553 ⚠	1-249-377-11	CARBON	0.47	5%	1/4W	F
R554	1-215-894-11	METAL OXIDE	2.2K	5%	2W	F
R555	1-249-441-11	CARBON	100K	5%	1/4W	
R556	1-249-441-11	CARBON	100K	5%	1/4W	
R557	1-249-441-11	CARBON	100K	5%	1/4W	
R559	1-216-017-91	RES, CHIP	47	5%	1/10W	
R560	1-215-922-11	METAL OXIDE	6.8K	5%	3W	F
R561	1-208-806-11	RES, CHIP	10K	0.50%	1/10W	
R563	1-214-798-21	METAL	1.8	1%	1/2W	
R565	1-215-889-00	METAL OXIDE	330	5%	2W	F
R566	1-216-069-00	RES, CHIP	6.8K	5%	1/10W	
R567 ⚠	1-249-385-11	CARBON	2.2	5%	1/4W	F
R568	1-216-069-00	RES, CHIP	6.8K	5%	1/10W	
R569	1-208-806-11	RES, CHIP	10K	0.50%	1/10W	
R570	1-216-097-91	RES, CHIP	100K	5%	1/10W	

REF.NO.	PART NO.	DESCRIPTION			REMARK	
R571	1-216-081-00	RES, CHIP	22K	5%	1/10W	
R572	1-216-081-00	RES, CHIP	22K	5%	1/10W	
R573	1-216-097-91	RES, CHIP	100K	5%	1/10W	
R574	1-214-798-21	METAL	1.8	1%	1/2W	
R576	1-215-905-11	METAL OXIDE	10	5%	3W	F
R577	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R578	1-216-057-00	RES, CHIP	2.2K	5%	1/10W	
R580	1-249-441-11	CARBON	100K	5%	1/4W	
R581	1-247-887-00	CARBON	220K	5%	1/4W	
R582	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1001	1-247-807-31	CARBON	100	5%	1/4W	
R1002	1-247-807-31	CARBON	100	5%	1/4W	
R1003	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R1005	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R1006	1-216-025-91	RES, CHIP	100	5%	1/10W	
R1007	1-216-025-91	RES, CHIP	100	5%	1/10W	
R1011	1-249-387-11	CARBON	3.3	5%	1/4W	F
R1012	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R1030	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	
R1031	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	
R1101	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R1102	1-215-900-11	METAL OXIDE	22K	5%	2W	F
R1103	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R1104	1-216-083-00	RES, CHIP	27K	5%	1/10W	
R1105	1-216-689-11	RES, CHIP	39K	5%	1/10W	
R1106	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R1107	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	
R1108	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R1109	1-216-017-91	RES, CHIP	47	5%	1/10W	
R1110	1-216-017-91	RES, CHIP	47	5%	1/10W	
R1111	1-216-017-91	RES, CHIP	47	5%	1/10W	
R1113	1-249-417-11	CARBON	1K	5%	1/4W	
R1114	1-249-417-11	CARBON	1K	5%	1/4W	
R1115	1-216-041-00	RES, CHIP	470	5%	1/10W	
R1117	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1118	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1120	1-216-059-00	RES, CHIP	2.7K	5%	1/10W	
R1121	1-216-037-00	RES, CHIP	330	5%	1/10W	
R1122	1-216-113-00	RES, CHIP	470K	5%	1/10W	
R1123	1-216-037-00	RES, CHIP	330	5%	1/10W	
R1125	1-216-059-00	RES, CHIP	2.7K	5%	1/10W	
R1126	1-216-037-00	RES, CHIP	330	5%	1/10W	
R1127	1-216-113-00	RES, CHIP	470K	5%	1/10W	
R1128	1-216-037-00	RES, CHIP	330	5%	1/10W	
R1129	1-216-295-91	SHORT				
R1130	1-216-059-00	RES, CHIP	2.7K	5%	1/10W	
R1301	1-249-401-11	CARBON	47	5%	1/4W	
R1302	1-249-401-11	CARBON	47	5%	1/4W	
R1303	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	
R1304	1-216-051-00	RES, CHIP	1.2K	5%	1/10W	
R1305	1-216-051-00	RES, CHIP	1.2K	5%	1/10W	
R1306	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R1313	1-216-295-91	SHORT				
R1314	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R1315	1-216-025-91	RES, CHIP	100	5%	1/10W	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

COMPLETE PARTS LISTING A

REF.NO.	PART NO.	DESCRIPTION			REMARK
R1316	1-216-091-00	RES, CHIP	56K	5%	1/10W
R1317	1-216-105-91	RES, CHIP	220K	5%	1/10W
R1318	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R1319	1-260-290-71	CARBON	0.68	5%	1/2W
R1320	1-216-073-00	RES, CHIP	10K	5%	1/10W
R1321	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R1322	1-216-047-91	RES, CHIP	820	5%	1/10W
R1323	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1324	1-216-295-91	SHORT			
R1325	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R1330	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R1333	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R1337	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1358	1-216-025-91	RES, CHIP	100	5%	1/10W
R1359	1-216-025-91	RES, CHIP	100	5%	1/10W
R1360	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1361	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1362	1-216-113-00	RES, CHIP	470K	5%	1/10W
R1363	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R1364	1-216-097-91	RES, CHIP	100K	5%	1/10W
R1365	1-216-089-91	RES, CHIP	47K	5%	1/10W
R1366	1-216-107-00	RES, CHIP	270K	5%	1/10W
R1369	1-216-093-91	RES, CHIP	68K	5%	1/10W
R1371	1-216-295-91	SHORT			
R1373	1-216-025-91	RES, CHIP	100	5%	1/10W
R1374	1-216-089-91	RES, CHIP	47K	5%	1/10W
R1385	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1387	1-249-429-11	CARBON	10K	5%	1/4W
R1389	1-216-025-91	RES, CHIP	100	5%	1/10W
R1390	1-249-417-11	CARBON	1K	5%	1/4W
R1391	1-216-081-00	RES, CHIP	22K	5%	1/10W
R1392	1-216-081-00	RES, CHIP	22K	5%	1/10W
R1395	1-216-055-00	RES, CHIP	1.8K	5%	1/10W
R1397	1-216-025-91	RES, CHIP	100	5%	1/10W
R1398	1-216-033-00	RES, CHIP	220	5%	1/10W

SWITCH

S501	1-572-707-11	SWITCH, LEVER
S502	1-572-707-11	SWITCH, LEVER

TRANSFORMER

T501	1-437-195-11	TRANSFORMER, HORIZONTAL DRIVE
T502⚠	1-426-981-11	TRANSFORMER, FERRITE (PMT)
T503⚠	1-453-286-11	FBT ASSY, NX-4600//X4C4
T504⚠	1-424-584-11	TRANSFORMER, DYNAMIC FOCUS
T505⚠	1-419-192-11	COIL, HORIZONTAL LINEARITY

THERMISTOR

TH501	1-800-193-00	THERMISTOR

REF.NO.	PART NO.	DESCRIPTION	REMARK

TUNER

TU102⚠	8-598-431-00	TUNER, FSS BTF-WA411 (KV-32FS10/32FV15/32XBR250/34FV10/34FV15/34FV15C/34FX250C/ 36FS10/36FV15/36XBR250/38FX250/38FX250C only	
TU102⚠	8-598-475-00	TUNER, FSS BTF-WL411 (KV-34FV15K/38FV15K only)	
TU102⚠	8-598-477-00	TUNER, FSS BTF-WG411 (KV-34FV15T/38FX250T only)	

CRYSTAL

X001	1-578-774-11	VIBRATOR, CRYSTAL
X302	1-567-505-11	OSCILLATOR, CRYSTAL

AK COMMON PARTS LISTING

AK

*** A-1298-956-A AK BOARD, COMPLETE**
(KV-32FS10/34FV10/36FS10 only)
*** A-1298-957-A AK BOARD, COMPLETE**
(KV-32FV15/34FV15/34FV15C/34FV15K/34FV15T/ 36FV15/38FV15K only)
*** A-1298-980-A AK BOARD, COMPLETE**
(KV-32XBR250/34FX250C/36XBR250/38FX250/38FX250C/38FX250T only)

4-382-854-11 SCREW (M3X10), P, SW (+)

CAPACITOR

REF.NO.	PART NO.	DESCRIPTION			REMARK
C101		VARIANT (SEE VARIANT PARTS LIST)			
C102		VARIANT (SEE VARIANT PARTS LIST)			
C104		VARIANT (SEE VARIANT PARTS LIST)			
C106		VARIANT (SEE VARIANT PARTS LIST)			
C108		VARIANT (SEE VARIANT PARTS LIST)			
C109		VARIANT (SEE VARIANT PARTS LIST)			
C110		VARIANT (SEE VARIANT PARTS LIST)			
C111		VARIANT (SEE VARIANT PARTS LIST)			
C113		VARIANT (SEE VARIANT PARTS LIST)			
C115		VARIANT (SEE VARIANT PARTS LIST)			
C175	1-126-941-11	ELECT	470µF	20%	25V
C440	1-126-965-11	ELECT	22µF	20%	50V
C441	1-165-319-11	CERAMIC CHIP	0.1µF		50V
C442	1-126-960-11	ELECT	1µF	20%	50V
C443	1-165-319-11	CERAMIC CHIP	0.1µF		50V
C444	1-164-346-11	CERAMIC CHIP	1µF		16V
C445	1-165-319-11	CERAMIC CHIP	0.1µF		50V
C446	1-164-346-11	CERAMIC CHIP	1µF		16V
C447	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C448	1-163-017-00	CERAMIC CHIP	0.0047µF	10%	50V
C449	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C453	1-163-017-00	CERAMIC CHIP	0.0047µF	10%	50V
C454	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C455	1-165-319-11	CERAMIC CHIP	0.1µF		50V
C456	1-163-023-00	CERAMIC CHIP	0.015µF	10%	50V
C457	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C1401	1-126-963-11	ELECT	4.7µF	20%	50V
C1402	1-126-968-11	ELECT	100µF	20%	50V
C1403	1-126-963-11	ELECT	4.7µF	20%	50V
C1404	1-126-960-11	ELECT	1µF	20%	50V
C1405	1-126-960-11	ELECT	1µF	20%	50V
C1406	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1407	1-163-989-11	CERAMIC CHIP	0.033µF	10%	25V
C1408	1-163-989-11	CERAMIC CHIP	0.033µF	10%	25V
C1409	1-164-182-11	CERAMIC CHIP	0.0033µF	10%	50V
C1410	1-163-018-00	CERAMIC CHIP	0.0056µF	10%	50V
C1411	1-164-182-11	CERAMIC CHIP	0.0033µF	10%	50V
C1412	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
C1413	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C1414	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C1415	1-126-963-11	ELECT	4.7µF	20%	50V
C1416	1-126-963-11	ELECT	4.7µF	20%	50V
C1417	1-126-963-11	ELECT	4.7µF	20%	50V
C1420	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
C1421	1-126-963-11	ELECT	4.7µF	20%	50V
C1422	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1423	1-126-941-11	ELECT	470µF	20%	25V
C1428	1-126-963-11	ELECT	4.7µF	20%	50V
C1429	1-126-963-11	ELECT	4.7µF	20%	50V
C1450	1-126-963-11	ELECT	4.7µF	20%	50V
C1451	1-126-963-11	ELECT	4.7µF	20%	50V
C1452	1-163-986-00	CERAMIC CHIP	0.027µF	10%	25V
C1461	1-126-960-11	ELECT	1µF	20%	50V
C1462	1-126-960-11	ELECT	1µF	20%	50V
C1464	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C1465	1-126-960-11	ELECT	1µF	20%	50V
C1467	1-104-666-11	ELECT	220µF	20%	25V
C1468	1-126-960-11	ELECT	1µF	20%	50V
C1470	1-126-960-11	ELECT	1µF	20%	50V
C1471	1-136-165-00	FILM	0.1µF	5%	50V
C1472	1-137-194-81	FILM	0.47µF	5%	50V
C1473	1-128-550-11	ELECT	2200µF	20%	50V
C1474	1-136-165-00	FILM	0.1µF	5%	50V
C1475	1-128-550-11	ELECT	2200µF	20%	50V
C1476	1-128-550-11	ELECT	2200µF	20%	50V
C1477	1-126-971-11	ELECT	470µF	20%	50V
C1478	1-126-971-11	ELECT	470µF	20%	50V
C1904		VARIANT (SEE VARIANT PARTS LIST)			
C1905		VARIANT (SEE VARIANT PARTS LIST)			
C1906		VARIANT (SEE VARIANT PARTS LIST)			
C1907		VARIANT (SEE VARIANT PARTS LIST)			
C1908		VARIANT (SEE VARIANT PARTS LIST)			
C1909		VARIANT (SEE VARIANT PARTS LIST)			
C1910		VARIANT (SEE VARIANT PARTS LIST)			
C1911		VARIANT (SEE VARIANT PARTS LIST)			
C1912		VARIANT (SEE VARIANT PARTS LIST)			

CONNECTOR

REF.NO.	PART NO.	DESCRIPTION
CN1462*	1-564-507-11	PLUG, CONNECTOR 4P
CN1463*	1-564-509-11	PLUG, CONNECTOR 6P
CN1464*	1-564-513-11	PLUG, CONNECTOR 10P
CN1465*		VARIANT (SEE VARIANT PARTS LIST)
CN1466*	1-564-515-11	PLUG, CONNECTOR 12P
CN1467*		VARIANT (SEE VARIANT PARTS LIST)
CN1468		VARIANT (SEE VARIANT PARTS LIST)

DIODE

REF.NO.	PART NO.	DESCRIPTION
D101		VARIANT (SEE VARIANT PARTS LIST)
D103		VARIANT (SEE VARIANT PARTS LIST)
D104		VARIANT (SEE VARIANT PARTS LIST)
D105		VARIANT (SEE VARIANT PARTS LIST)
D106		VARIANT (SEE VARIANT PARTS LIST)

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

COMMON PARTS LISTING AK

REF.NO.	PART NO.	DESCRIPTION	REMARK
D107		VARIANT (SEE VARIANT PARTS LIST)	
D108		VARIANT (SEE VARIANT PARTS LIST)	
D109		VARIANT (SEE VARIANT PARTS LIST)	
D1461	8-719-991-33	DIODE 1SS133T-77	
D1463	8-719-991-33	DIODE 1SS133T-77	
D1466	8-719-991-33	DIODE 1SS133T-77	
D1467	8-719-924-13	DIODE MTZJ-T-77-22B	
D1468	8-719-924-13	DIODE MTZJ-T-77-22B	

IC

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC1401	8-759-578-88	IC BH3868FS-E2	
IC1402	8-759-100-96	IC UPC4558G2	
IC1403	8-759-537-26	IC TDA7467D013TR	
IC1461 ⚠	8-759-168-24	IC TA18200AH	
IC1901		VARIANT (SEE VARIANT PARTS LIST)	
IC1902		VARIANT (SEE VARIANT PARTS LIST)	

CHIP CONDUCTOR

REF.NO.	PART NO.	DESCRIPTION	REMARK
JR1901	1-216-295-91	SHORT	
JR1902	1-216-295-91	SHORT	

COIL

REF.NO.	PART NO.	DESCRIPTION	REMARK
L102		VARIANT (SEE VARIANT PARTS LIST)	
L105		VARIANT (SEE VARIANT PARTS LIST)	
L1401	1-414-857-11	INDUCTOR 100µH	

IC LINK

REF.NO.	PART NO.	DESCRIPTION	REMARK
PS1461 ⚠	1-532-984-11	LINK, IC 2A/90V	

TRANSISTOR

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q101		VARIANT (SEE VARIANT PARTS LIST)	
Q105		VARIANT (SEE VARIANT PARTS LIST)	
Q106		VARIANT (SEE VARIANT PARTS LIST)	
Q451		VARIANT (SEE VARIANT PARTS LIST)	
Q1461	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1462	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1463	8-729-900-53	TRANSISTOR DTC114EK	
Q1464	8-729-900-53	TRANSISTOR DTC114EK	
Q1902		VARIANT (SEE VARIANT PARTS LIST)	
Q1903		VARIANT (SEE VARIANT PARTS LIST)	
Q1918		VARIANT (SEE VARIANT PARTS LIST)	

RESISTOR

REF.NO.	PART NO.	DESCRIPTION			REMARK
R101		VARIANT (SEE VARIANT PARTS LIST)			
R102		VARIANT (SEE VARIANT PARTS LIST)			
R103		VARIANT (SEE VARIANT PARTS LIST)			
R104		VARIANT (SEE VARIANT PARTS LIST)			
R112		VARIANT (SEE VARIANT PARTS LIST)			
R113		VARIANT (SEE VARIANT PARTS LIST)			
R114		VARIANT (SEE VARIANT PARTS LIST)			
R115		VARIANT (SEE VARIANT PARTS LIST)			
R116		VARIANT (SEE VARIANT PARTS LIST)			
R117		VARIANT (SEE VARIANT PARTS LIST)			
R118		VARIANT (SEE VARIANT PARTS LIST)			
R119		VARIANT (SEE VARIANT PARTS LIST)			
R440	1-216-049-91	RES, CHIP	1K	5%	1/10W
R441	1-216-100-00	RES, CHIP	130K	5%	1/10W
R442	1-216-088-00	RES, CHIP	43K	5%	1/10W
R443	1-216-053-00	RES, CHIP	1.5K	5%	1/10W
R444	1-216-089-91	RES, CHIP	47K	5%	1/10W
R445	1-216-085-00	RES, CHIP	33K	5%	1/10W
R446	1-216-063-91	RES, CHIP	3.9K	5%	1/10W
R450		VARIANT (SEE VARIANT PARTS LIST)			
R1403	1-216-121-91	RES, CHIP	1M	5%	1/10W
R1404	1-216-295-91	SHORT			
R1406	1-216-121-91	RES, CHIP	1M	5%	1/10W
R1407	1-216-073-00	RES, CHIP	10K	5%	1/10W
R1408	1-216-295-91	SHORT			
R1409	1-216-295-91	SHORT			
R1410	1-216-081-00	RES, CHIP	22K	5%	1/10W
R1411	1-216-073-00	RES, CHIP	10K	5%	1/10W
R1412	1-216-089-91	RES, CHIP	47K	5%	1/10W
R1413	1-216-089-91	RES, CHIP	47K	5%	1/10W
R1415	1-216-025-91	RES, CHIP	100	5%	1/10W
R1416	1-216-081-00	RES, CHIP	22K	5%	1/10W
R1417	1-216-081-00	RES, CHIP	22K	5%	1/10W
R1418	1-216-089-91	RES, CHIP	47K	5%	1/10W
R1421	1-216-025-91	RES, CHIP	100	5%	1/10W
R1422	1-216-033-00	RES, CHIP	220	5%	1/10W
R1423	1-216-033-00	RES, CHIP	220	5%	1/10W
R1424	1-216-081-00	RES, CHIP	22K	5%	1/10W
R1425	1-216-081-00	RES, CHIP	22K	5%	1/10W
R1427	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R1458	1-216-033-00	RES, CHIP	220	5%	1/10W
R1459	1-216-033-00	RES, CHIP	220	5%	1/10W
R1461	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R1462	1-216-073-00	RES, CHIP	10K	5%	1/10W
R1464	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R1465	1-216-089-91	RES, CHIP	47K	5%	1/10W
R1466	1-216-089-91	RES, CHIP	47K	5%	1/10W
R1467	1-216-073-00	RES, CHIP	10K	5%	1/10W
R1469	1-249-389-11	CARBON	4.7	5%	1/4W F
R1470	1-249-389-11	CARBON	4.7	5%	1/4W F
R1471	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1472	1-216-077-00	RES, CHIP	15K	5%	1/10W
R1473	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1474	1-216-033-00	RES, CHIP	220	5%	1/10W
R1475	1-216-033-00	RES, CHIP	220	5%	1/10W
R1480	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R1481	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R1482	1-216-295-91	SHORT			
R1483	1-216-295-91	SHORT			
R1486		VARIANT (SEE VARIANT PARTS LIST)			

AK COMMON PARTS LISTING

REF.NO.	PART NO.	DESCRIPTION	REMARK
R1487		VARIANT (SEE VARIANT PARTS LIST)	
R1902		VARIANT (SEE VARIANT PARTS LIST)	
R1904		VARIANT (SEE VARIANT PARTS LIST)	
R1906		VARIANT (SEE VARIANT PARTS LIST)	
R1907		VARIANT (SEE VARIANT PARTS LIST)	
R2904		VARIANT (SEE VARIANT PARTS LIST)	
R2905		VARIANT (SEE VARIANT PARTS LIST)	
R2909		VARIANT (SEE VARIANT PARTS LIST)	
R2910		VARIANT (SEE VARIANT PARTS LIST)	
R2912		VARIANT (SEE VARIANT PARTS LIST)	
R2913		VARIANT (SEE VARIANT PARTS LIST)	
R2914		VARIANT (SEE VARIANT PARTS LIST)	
R2915		VARIANT (SEE VARIANT PARTS LIST)	
R2916		VARIANT (SEE VARIANT PARTS LIST)	

TUNER

REF.NO.	PART NO.	DESCRIPTION	REMARK
TU101		VARIANT (SEE VARIANT PARTS LIST)	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

AK BOARD VARIANT PARTS LIST

The parts on this page belong to the following model(s) only:

KV-32FV15/34FV15/34FV15C/34FV15K/34FV15T/36FV15/38FV15K

AK BOARD VARIANT PARTS LIST:
KV-32FV15/34FV15/34FV15C/34FV15K/34FV15T/36FV15/38FV15K

CAPACITOR

REF.NO.	PART NO.	DESCRIPTION			REMARK
C101	1-126-960-11	ELECT	1μF	20%	50V
C102	1-164-161-11	CERAMIC	0.0022μF	10%	50V
C104	1-126-964-11	ELECT	10μF	20%	50V
C106	1-104-664-11	ELECT	47μF	20%	25V
C108	1-126-942-61	ELECT	1000μF	20%	25V
C109	1-163-259-91	CERAMIC	220pF	5%	50V
C110	1-163-809-11	CERAMIC	0.047μF	10%	25V
C111	1-126-960-11	ELECT	1μF	20%	50V
C113	1-104-666-11	ELECT	220μF	20%	25V
C115	1-126-960-11	ELECT	1μF	20%	50V
C1904	1-102-129-00	CERAMIC	0.01μF	10%	50V
C1905	1-126-964-11	ELECT	10μF	20%	50V
C1906	1-102-129-00	CERAMIC	0.01μF	10%	50V
C1907	1-126-964-11	ELECT	10μF	20%	50V
C1908	1-163-009-11	CERAMIC	0.001μF	10%	50V
C1909	1-163-009-11	CERAMIC	0.001μF	10%	50V
C1910	1-163-009-11	CERAMIC	0.001μF	10%	50V
C1911	1-163-009-11	CERAMIC	0.001μF	10%	50V
C1912	1-163-009-11	CERAMIC	0.001μF	10%	50V

CONNECTOR

REF.NO.	PART NO.	DESCRIPTION
CN1467*	1-564-510-11	PLUG, CONNECTOR 7P
CN1468	1-695-915-11	TAB (CONTACT)

DIODE

REF.NO.	PART NO.	DESCRIPTION
D101	8-719-109-89	DIODE RD5.6ESB2
D103	8-719-991-33	DIODE 1SS133T-77
D104	8-719-991-33	DIODE 1SS133T-77
D105	8-719-991-33	DIODE 1SS133T-77
D106	8-719-991-33	DIODE 1SS133T-77
D107	8-719-991-33	DIODE 1SS133T-77
D108	8-719-110-17	DIODE RD10ESB2
D109	8-719-110-17	DIODE RD10ESB2

IC

REF.NO.	PART NO.	DESCRIPTION
IC1901	8-752-058-68	IC CXA1315M
IC1902	8-759-470-63	IC NJM2145M-TE2

COIL

REF.NO.	PART NO.	DESCRIPTION	
L102	1-414-856-11	INDUCTOR	10μH
L105	1-414-857-11	INDUCTOR	100μH

TRANSISTOR

REF.NO.	PART NO.	DESCRIPTION	
Q101	8-729-119-78	TRANSISTOR	2SC2785-HFE
Q105	8-729-216-22	TRANSISTOR	2SA1162-G
Q106	8-729-422-27	TRANSISTOR	2SD601A-Q
Q1902	8-729-216-22	TRANSISTOR	2SA1162-G
Q1903	8-729-216-22	TRANSISTOR	2SA1162-G
Q1918	8-729-216-22	TRANSISTOR	2SA1162-G

RESISTOR

REF.NO.	PART NO.	DESCRIPTION			REMARK
R101	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R102	1-216-083-00	RES, CHIP	27K	5%	1/10W
R103	1-216-689-11	RES, CHIP	39K	5%	1/10W
R104	1-216-049-91	RES, CHIP	1K	5%	1/10W
R112	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R113	1-216-097-91	RES, CHIP	100K	5%	1/10W
R114	1-216-121-91	RES, CHIP	1M	5%	1/10W
R115	1-216-073-00	RES, CHIP	10K	5%	1/10W
R116	1-216-073-00	RES, CHIP	10K	5%	1/10W
R117	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R118	1-208-774-11	RES, CHIP	470	0.50%	1/10W
R119	1-208-776-11	RES, CHIP	560	0.50%	1/10W
R1486	1-216-033-00	RES, CHIP	220	5%	1/10W
R1487	1-216-033-00	RES, CHIP	220	5%	1/10W
R1902	1-216-073-00	RES, CHIP	10K	5%	1/10W
R1904	1-216-073-00	RES, CHIP	10K	5%	1/10W
R1906	1-216-073-00	RES, CHIP	10K	5%	1/10W
R1907	1-216-033-00	RES, CHIP	220	5%	1/10W
R2904	1-216-033-00	RES, CHIP	220	5%	1/10W
R2905	1-216-033-00	RES, CHIP	220	5%	1/10W
R2909	1-216-073-00	RES, CHIP	10K	5%	1/10W
R2910	1-216-073-00	RES, CHIP	10K	5%	1/10W
R2912	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R2913	1-216-073-00	RES, CHIP	10K	5%	1/10W
R2914	1-216-073-00	RES, CHIP	10K	5%	1/10W
R2915	1-216-073-00	RES, CHIP	10K	5%	1/10W
R2916	1-216-073-00	RES, CHIP	10K	5%	1/10W

TUNER

REF.NO.	PART NO.	DESCRIPTION
TU101⚠	8-598-430-00	TUNER, FSS BTF-FA401

AK BOARD VARIANT PARTS LIST

The parts on this page belong to the following model(s) only:
KV-32XBR250/34FX250C/36XBR250/38FX250/38FX250C/38FX250T

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

AK BOARD VARIANT PARTS LIST:
KV-32XBR250/34FX250C/36XBR250/38FX250/38FX250C/38FX250T

CAPACITOR

REF.NO.	PART NO.	DESCRIPTION			REMARK
C101	1-126-960-11	ELECT	1µF	20%	50V
C102	1-164-161-11	CERAMIC	0.0022µF	10%	50V
C104	1-126-964-11	ELECT	10µF	20%	50V
C106	1-104-664-11	ELECT	47µF	20%	25V
C108	1-126-942-61	ELECT	1000µF	20%	25V
C109	1-163-259-91	CERAMIC	220pF	5%	50V
C110	1-163-809-11	CERAMIC	0.047µF	10%	25V
C111	1-126-960-11	ELECT	1µF	20%	50V
C113	1-104-666-11	ELECT	220µF	20%	25V
C115	1-126-960-11	ELECT	1µF	20%	50V
C1904	1-102-129-00	CERAMIC	0.01µF	10%	50V
C1905	1-126-964-11	ELECT	10µF	20%	50V
C1906	1-102-129-00	CERAMIC	0.01µF	10%	50V
C1907	1-126-964-11	ELECT	10µF	20%	50V
C1908	1-163-009-11	CERAMIC	0.001µF	10%	50V
C1909	1-163-009-11	CERAMIC	0.001µF	10%	50V
C1910	1-163-009-11	CERAMIC	0.001µF	10%	50V
C1911	1-163-009-11	CERAMIC	0.001µF	10%	50V
C1912	1-163-009-11	CERAMIC	0.001µF	10%	50V

CONNECTOR

REF.NO.	PART NO.	DESCRIPTION
CN1465*	1-564-507-51	PLUG, CONNECTOR 4P
CN1467*	1-564-510-11	PLUG, CONNECTOR 7P
CN1468	1-695-915-11	TAB (CONTACT)

DIODE

REF.NO.	PART NO.	DESCRIPTION
D101	8-719-109-89	DIODE RD5.6ESB2
D103	8-719-991-33	DIODE 1SS133T-77
D104	8-719-991-33	DIODE 1SS133T-77
D105	8-719-991-33	DIODE 1SS133T-77
D106	8-719-991-33	DIODE 1SS133T-77
D107	8-719-991-33	DIODE 1SS133T-77
D108	8-719-110-17	DIODE RD10ESB2
D109	8-719-110-17	DIODE RD10ESB2

IC

REF.NO.	PART NO.	DESCRIPTION
IC1901	8-752-058-68	IC CXA1315M
IC1902	8-759-470-63	IC NJM2145M-TE2

COIL

REF.NO.	PART NO.	DESCRIPTION	
L102	1-414-856-11	INDUCTOR	10µH
L105	1-414-857-11	INDUCTOR	100µH

TRANSISTOR

REF.NO.	PART NO.	DESCRIPTION
Q101	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q105	8-729-216-22	TRANSISTOR 2SA1162-G
Q106	8-729-422-27	TRANSISTOR 2SD601A-Q
Q451	8-729-140-97	TRANSISTOR 2SB734-34
Q1902	8-729-216-22	TRANSISTOR 2SA1162-G
Q1903	8-729-216-22	TRANSISTOR 2SA1162-G
Q1918	8-729-216-22	TRANSISTOR 2SA1162-G

RESISTOR

REF.NO.	PART NO.	DESCRIPTION			REMARK
R101	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R102	1-216-083-00	RES, CHIP	27K	5%	1/10W
R103	1-216-689-11	RES, CHIP	39K	5%	1/10W
R104	1-216-049-91	RES, CHIP	1K	5%	1/10W
R112	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R113	1-216-097-91	RES, CHIP	100K	5%	1/10W
R114	1-216-121-91	RES, CHIP	1M	5%	1/10W
R115	1-216-073-00	RES, CHIP	10K	5%	1/10W
R116	1-216-073-00	RES, CHIP	10K	5%	1/10W
R117	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R118	1-208-774-11	RES, CHIP	470	0.50%	1/10W
R119	1-208-776-11	RES, CHIP	560	0.50%	1/10W
R450	1-216-073-00	RES, CHIP	10K	5%	1/10W
R1486	1-216-033-00	RES, CHIP	220	5%	1/10W
R1487	1-216-033-00	RES, CHIP	220	5%	1/10W
R1902	1-216-073-00	RES, CHIP	10K	5%	1/10W
R1904	1-216-073-00	RES, CHIP	10K	5%	1/10W
R1906	1-216-073-00	RES, CHIP	10K	5%	1/10W
R1907	1-216-033-00	RES, CHIP	220	5%	1/10W
R2904	1-216-033-00	RES, CHIP	220	5%	1/10W
R2905	1-216-033-00	RES, CHIP	220	5%	1/10W
R2909	1-216-073-00	RES, CHIP	10K	5%	1/10W
R2910	1-216-073-00	RES, CHIP	10K	5%	1/10W
R2912	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R2913	1-216-073-00	RES, CHIP	10K	5%	1/10W
R2914	1-216-073-00	RES, CHIP	10K	5%	1/10W
R2915	1-216-073-00	RES, CHIP	10K	5%	1/10W
R2916	1-216-073-00	RES, CHIP	10K	5%	1/10W

TUNER

REF.NO.	PART NO.	DESCRIPTION
TU101⚠	8-598-430-00	TUNER, FSS BTF-FA401

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

C G

COMPLETE PARTS LISTING

C

* **A-1331-942-A C BOARD, COMPLETE (All Models)**

4-382-854-11 SCREW (M3X10), P, SW (+)

CAPACITOR

REF.NO.	PART NO.	DESCRIPTION			REMARK
C1750	1-137-528-11	FILM	0.1µF	10%	250V
C1751	1-107-655-11	ELECT	47µF	20%	250V
C1790	1-102-129-00	CERAMIC	0.01µF	10%	50V
C1791	1-126-968-11	ELECT	100µF	20%	50V
C1792	1-102-106-00	CERAMIC	100pF	10%	50V
C1794	1-107-651-11	ELECT	4.7µF	20%	250V
C1795	1-102-074-00	CERAMIC	0.001µF	10%	50V
C1799	1-162-114-00	CERAMIC	0.0047µF		2KV

CONNECTOR

REF.NO.	PART NO.	DESCRIPTION
CN1761	*1-564-509-11	PLUG, CONNECTOR 6P
CN1764	*1-564-508-11	PLUG, CONNECTOR 5P
CN1766	1-695-915-11	TAB (CONTACT)

DIODE

REF.NO.	PART NO.	DESCRIPTION
D1790	8-719-991-33	DIODE 1SS133T-77
D1791	8-719-908-03	DIODE GP08D
D1792	8-719-908-03	DIODE GP08D
D1793	8-719-908-03	DIODE GP08D
D1794	8-719-908-03	DIODE GP08D

IC

REF.NO.	PART NO.	DESCRIPTION
IC1701⚠	8-759-562-43	IC TDA6108JF/N1B

JACK

REF.NO.	PART NO.	DESCRIPTION
J1761⚠	1-540-071-22	SOCKET, CRT

COIL

REF.NO.	PART NO.	DESCRIPTION	
L1790	1-412-537-31	INDUCTOR	100µH

TRANSISTOR

REF.NO.	PART NO.	DESCRIPTION
Q1790	8-729-119-76	TRANSISTOR 2SA1175-HFE

RESISTOR

REF.NO.	PART NO.	DESCRIPTION			REMARK	
R1750	1-247-870-11	CARBON	43K	5%	1/4W	
R1751	1-247-807-31	CARBON	100	5%	1/4W	
R1752	1-247-807-31	CARBON	100	5%	1/4W	
R1753⚠	1-247-807-31	CARBON	100	5%	1/4W	
R1763	1-260-099-11	CARBON	1K	5%	1/2W	
R1764	1-247-807-31	CARBON	100	5%	1/4W	
R1773	1-260-099-11	CARBON	1K	5%	1/2W	
R1774	1-247-807-31	CARBON	100	5%	1/4W	
R1783	1-260-099-11	CARBON	1K	5%	1/2W	
R1784	1-247-807-31	CARBON	100	5%	1/4W	
R1788	1-216-349-00	METAL OXIDE	1	5%	1W	F
R1789	1-249-437-11	CARBON	47K	5%	1/4W	
R1792	1-247-815-91	CARBON	220	5%	1/4W	
R1793	1-247-866-11	CARBON	30K	5%	1/4W	
R1794	1-260-132-11	CARBON	560K	5%	1/2W	
R1795	1-260-087-11	CARBON	100	5%	1/2W	
R1796⚠	1-216-374-00	METAL OXIDE	2.7	5%	2W	F
R1797	1-260-123-11	CARBON	100K	5%	1/2W	

VARIABLE RESISTOR

REF.NO.	PART NO.	DESCRIPTION
RV1761	1-241-714-11	RES, ADJ, METAL FILM 110M

G

* **A-1316-397-A G BOARD, COMPLETE**
(KV-32FS10/32FV15/32XBR250/36FS10/36FV15/36XBR250 only)
* **A-1316-423-A G BOARD, COMPLETE**
(KV-34FV15T/38FX250T only)

1-533-223-11 HOLDER, FUSE
4-382-854-11 SCREW (M3X10), P, SW (+)

CAPACITOR

REF.NO.	PART NO.	DESCRIPTION			REMARK
C601	1-136-346-21	FILM	0.22µF	20%	125V
C602	1-126-964-11	ELECT	10µF	20%	50V
C603⚠	1-127-790-51	CERAMIC	1000pF	20%	250V
	(KV-32FS10/32FV15/32XBR250/36FS10/36FV15/36XBR250 only)				
C603⚠	1-127-794-51	CERAMIC	2200pF	20%	250V
	(KV-34FV15T/38FX250T only)				
C604⚠	1-136-346-21	FILM	0.22µF	20%	125V
	(KV-32FS10/32FV15/32XBR250/36FS10/36FV15/36XBR250 only)				
C604⚠	1-136-311-11	FILM	0.47µF	20%	125V
	(KV-34FV15T/38FX250T only)				
C605⚠	1-136-346-21	FILM	0.22µF	20%	125V
	(KV-32FS10/32FV15/32XBR250/36FS10/36FV15/36XBR250 only)				
C605⚠	1-136-311-11	FILM	0.47µF	20%	125V
	(KV-34FV15T/38FX250T only)				
C606⚠	1-117-894-11	ELECT	560µF	20%	250V
C607⚠	1-117-894-11	ELECT	560µF	20%	250V
C608	1-107-824-11	CERAMIC	220pF	5%	1KV
C609	1-136-176-00	FILM	0.82µF	5%	50V
C610	1-136-176-00	FILM	0.82µF	5%	50V
C611	1-136-169-00	FILM	0.22µF	5%	50V
C612	1-136-169-00	FILM	0.22µF	5%	50V
C613	1-164-646-11	CERAMIC	2200pF	10%	500V
C614	1-126-963-11	ELECT	4.7µF	20%	50V
C615	1-117-976-11	FILM	0.039µF	5%	800V
C616⚠	1-127-790-51	CERAMIC	1000pF	20%	250V
	(KV-32FS10/32FV15/32XBR250/36FS10/36FV15/36XBR250 only)				

G COMPLETE PARTS LISTING

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

REF.NO.	PART NO.	DESCRIPTION			REMARK
C616⚠	1-127-794-51	CERAMIC	2200pF	20%	250V
(KV-34FV15T/38FX250T only)					
C618	1-126-968-11	ELECT	100µF	20%	50V
C624	1-126-960-11	ELECT	1µF	20%	50V
C629⚠	1-107-652-11	ELECT	10µF	20%	250V
C630	1-130-471-00	MYLAR	0.001µF	5%	50V
C631	1-137-605-11	FILM	0.01µF	10%	250V
C633	1-130-471-00	MYLAR	0.001µF	5%	50V
C634	1-130-467-00	MYLAR	470pF	5%	50V
C635	1-130-471-00	MYLAR	0.001µF	5%	50V
C636	1-126-965-11	ELECT	22µF	20%	50V
C637	1-126-940-11	ELECT	330µF	20%	25V
C641	1-128-550-11	ELECT	2200µF	20%	50V
C643	1-107-995-11	ELECT	100µF	0	160V
C644	1-104-664-11	ELECT	47µF	20%	25V
C647	1-104-665-11	ELECT	100µF	20%	25V
C650	1-104-664-11	ELECT	47µF	20%	25V
C651	1-130-477-00	MYLAR	0.0033µF	5%	50V
C652	1-106-351-00	MYLAR	0.0022µF	20%	200V
C653	1-107-636-11	ELECT	10µF	20%	160V
C656	1-126-964-11	ELECT	10µF	20%	50V
C657	1-137-372-11	FILM	0.022µF	5%	50V
C658	1-126-941-11	ELECT	470µF	20%	25V
C660	1-126-936-11	ELECT	3300µF	20%	16V
C661	1-104-664-11	ELECT	47µF	20%	25V
C662	1-126-933-11	ELECT	100µF	20%	16V
C665	1-104-664-11	ELECT	47µF	20%	25V
C695	1-164-625-11	CERAMIC	680pF	10%	500V
C696	1-164-625-11	CERAMIC	680pF	10%	500V
C697	1-164-625-11	CERAMIC	680pF	10%	500V
C698	1-164-625-11	CERAMIC	680pF	10%	500V
C699	1-136-169-00	FILM	0.22µF	5%	50V

CONNECTOR

REF.NO.	PART NO.	DESCRIPTION
CN601 *	1-573-963-11	PIN, CONNECTOR (PC BOARD) 3P
CN602 *	1-580-844-11	PIN, CONNECTOR (POWER)
CN603 *	1-573-963-11	PIN, CONNECTOR (PC BOARD) 3P
CN641 *	1-564-515-11	PLUG, CONNECTOR 12P
CN642 *	1-564-509-11	PLUG, CONNECTOR 6P
CN643 *	1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P
CN645	1-695-915-11	TAB (CONTACT)
CN646	1-695-915-11	TAB (CONTACT)

DIODE

REF.NO.	PART NO.	DESCRIPTION
D600	8-719-991-33	DIODE 1SS133T-77
D601	8-719-991-33	DIODE 1SS133T-77
D602⚠	8-719-510-53	DIODE D4SB60L
D603	8-719-063-70	DIODE D1NL20U
D604	8-719-991-33	DIODE 1SS133T-77
D605	8-719-923-83	DIODE MTZJ-T-77-13A
D606	8-719-110-60	DIODE RD24ESB
D607	8-719-109-97	DIODE RD6.8ESB2
D608	8-719-109-97	DIODE RD6.8ESB2
D612	8-719-991-33	DIODE 1SS133T-77
D613	8-719-991-33	DIODE 1SS133T-77
D614	8-719-991-33	DIODE 1SS133T-77
D621	8-719-911-55	DIODE U05G
D622	8-719-911-55	DIODE U05G
D623	8-719-948-45	DIODE ERA22-08
D624	8-719-991-33	DIODE 1SS133T-77
D625	8-719-991-33	DIODE 1SS133T-77
D626	8-719-109-93	DIODE RD6.2ESB2
D627	8-719-510-48	DIODE D1N20R
D628	8-719-510-02	DIODE D1NS4
D629	8-719-052-90	DIODE D1NL40-TA2
D630	8-719-052-90	DIODE D1NL40-TA2
D641	8-719-060-89	DIODE D4SBS6-F
D642	8-719-510-12	DIODE D10SC4M
D643	8-719-062-40	DIODE D4SBL20UF3
D647	8-719-063-70	DIODE D1NL20U
D648⚠	8-719-057-52	DIODE EZ0150AV1
D651	8-719-510-02	DIODE D1NS4
D652	8-719-510-02	DIODE D1NS4
D653	8-719-991-33	DIODE 1SS133T-77
D698	8-719-991-33	DIODE 1SS133T-77
D699	8-719-923-86	DIODE MTZJ-T-77-15

FUSE

REF.NO.	PART NO.	DESCRIPTION
F601⚠	1-532-506-51	FUSE 6.3A/250V

FERRITE BEAD

REF.NO.	PART NO.	DESCRIPTION	
FB601	1-410-396-41	FERRITE	0.45µH
FB602	1-410-396-41	FERRITE	0.45µH
FB603	1-410-396-41	FERRITE	0.45µH
FB604	1-410-396-41	FERRITE	0.45µH
FB641	1-410-397-21	FERRITE	1.1µH
FB642	1-410-397-21	FERRITE	1.1µH
FB645	1-410-397-21	FERRITE	1.1µH
FB647	1-410-397-21	FERRITE	1.1µH

IC

REF.NO.	PART NO.	DESCRIPTION
IC601⚠	8-729-045-41	TRANSISTOR MX0842B-F
IC622	8-759-450-47	IC BA05T
IC641	8-759-198-03	IC PQ09RF21
IC643	1-810-051-11	POWER MODULE DM-48
IC650	8-759-394-35	IC BA12T
IC651	8-759-450-47	IC BA05T

COIL

REF.NO.	PART NO.	DESCRIPTION	
L642	1-412-529-11	INDUCTOR	22µH
L650	1-412-519-11	INDUCTOR	3.3µH
L651	1-412-519-11	INDUCTOR	3.3µH
L652	1-412-519-11	INDUCTOR	3.3µH

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

COMPLETE PARTS LISTING

G

TRANSISTOR

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q621⚠	8-729-044-30	TRANSISTOR 2SK2845-LB102	
Q622	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q623	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q624	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q644	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q645	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q646	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q647	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q648	8-729-922-39	TRANSISTOR 2SD2144S-V	
Q649	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q650	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q651	8-729-802-71	TRANSISTOR 2SA1407-E	
Q652	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q653	8-729-119-78	TRANSISTOR 2SC2785-HFE	

RESISTOR

REF.NO.	PART NO.	DESCRIPTION				REMARK
R601⚠	1-249-377-11	CARBON	0.47	5%	1/4W	F
R602	1-249-429-11	CARBON	10K	5%	1/4W	
R603⚠	1-219-776-11	CARBON	2.2M	10%	1/2W	
R604	1-249-429-11	CARBON	10K	5%	1/4W	
R605	1-249-429-11	CARBON	10K	5%	1/4W	
R606	1-249-421-11	CARBON	2.2K	5%	1/4W	
R607⚠	1-202-933-61	FUSIBLE	0.1	10%	1/2W	F
R608	1-216-369-00	METAL OXIDE	1	5%	2W	F
R609	1-249-417-11	CARBON	1K	5%	1/4W	
R610	1-249-425-11	CARBON	4.7K	5%	1/4W	
R611	1-216-369-00	METAL OXIDE	1	5%	2W	F
R612	1-260-124-11	CARBON	120K	5%	1/2W	
R613	1-260-124-11	CARBON	120K	5%	1/2W	
R614	1-260-124-11	CARBON	120K	5%	1/2W	
R615	1-260-124-11	CARBON	120K	5%	1/2W	
R618	1-249-425-11	CARBON	4.7K	5%	1/4W	
R619	1-249-425-11	CARBON	4.7K	5%	1/4W	
R620	1-126-967-11	ELECT	47µF	20%	50V	
R621	1-249-429-11	CARBON	10K	5%	1/4W	
R622	1-247-863-91	CARBON	22K	5%	1/4W	
R623⚠	1-240-257-11	CMT,MELF	3.9	5%	20W	
R624⚠	1-215-485-00	METAL	470K	1%	1/4W	
R625⚠	1-215-485-00	METAL	470K	1%	1/4W	
R626	1-249-425-11	CARBON	4.7K	5%	1/4W	
R627	1-249-405-11	CARBON	100	5%	1/4W	F
R631	1-240-205-91	CARBON	22M	5%	1/2W	
R632	1-249-421-11	CARBON	2.2K	5%	1/4W	
R633	1-249-429-11	CARBON	10K	5%	1/4W	
R634	1-249-437-11	CARBON	47K	5%	1/4W	
R635	1-247-791-91	CARBON	22	5%	1/4W	
R636	1-249-415-11	CARBON	680	5%	1/4W	
R637	1-260-302-51	CARBON	6.8	5%	1/2W	
R638	1-249-413-11	CARBON	470	5%	1/4W	
R639⚠	1-249-389-11	CARBON	4.7	5%	1/4W	F
R640	1-215-485-00	METAL	470K	1%	1/4W	
R641	1-247-843-11	CARBON	3.3K	5%	1/4W	
R642	1-247-843-11	CARBON	3.3K	5%	1/4W	
R643	1-249-387-11	CARBON	3.3	5%	1/2W	F
R644	1-249-417-11	CARBON	1K	5%	1/4W	
R645	1-249-429-11	CARBON	10K	5%	1/4W	
R646	1-249-417-11	CARBON	1K	5%	1/4W	
R648	1-249-441-11	CARBON	100K	5%	1/4W	
R649	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R650	1-249-421-11	CARBON	2.2K	5%	1/4W	
R651	1-215-908-00	METAL OXIDE	33	5%	3W	F
R652⚠	1-216-363-00	METAL OXIDE	0.33	5%	2W	F
R653	1-215-423-00	METAL	1.2K	1%	1/4W	
R654	1-215-481-00	METAL	330K	1%	1/4W	
R655	1-215-469-00	METAL	100K	1%	1/4W	
R656	1-249-427-11	CARBON	6.8K	5%	1/4W	
R657	1-249-421-11	CARBON	2.2K	5%	1/4W	
R659	1-249-429-11	CARBON	10K	5%	1/4W	
R660	1-249-393-11	CARBON	10	5%	1/4W	F
R661⚠	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R662	1-215-485-00	METAL	470K	1%	1/4W	
R663	1-215-445-00	METAL	10K	1%	1/4W	
R664⚠	1-240-257-11	CMT,MELF	3.9	5%	20W	
R665	1-249-425-11	CARBON	4.7K	5%	1/4W	
R670	1-260-312-11	CARBON	47	5%	1/2W	
R671	1-260-312-11	CARBON	47	5%	1/2W	
R680	1-216-364-11	METAL OXIDE	0.39	5%	2W	F
R681	1-216-365-00	METAL OXIDE	0.47	5%	2W	F
R699	1-249-429-11	CARBON	10K	5%	1/4W	

RELAY

REF.NO.	PART NO.	DESCRIPTION	REMARK
RY600⚠	1-755-266-11	RELAY, AC POWER	
RY601⚠	1-755-146-11	RELAY, AC POWER	

TRANSFORMER

REF.NO.	PART NO.	DESCRIPTION	REMARK
T601⚠	1-426-717-11	TRANSFORMER, LINE FILTER (LFT)	
T602⚠	1-426-717-11	TRANSFORMER, LINE FILTER (LFT)	
T603⚠	1-429-992-21	TRANSFORMER, CONVERTER (PRT)	
T605⚠	1-433-408-11	TRANSFORMER, CONVERTER (PIT)	
T621⚠	1-431-852-11	TRANSFORMER, CONVERTER (SRT)	

THERMISTOR

REF.NO.	PART NO.	DESCRIPTION	REMARK
THP601⚠	1-809-539-11	THERMISTOR, POSITIVE	
THP602⚠	1-809-539-11	THERMISTOR, POSITIVE	

VARISTOR

REF.NO.	PART NO.	DESCRIPTION	REMARK
VDR601⚠	1-801-074-41	VARISTOR ERZV10D271	
VDR602⚠	1-801-074-41	VARISTOR ERZV10D271	

GA COMPLETE PARTS LISTING

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

GA

REF.NO.	PART NO.	DESCRIPTION			REMARK
*	**A-1316-470-A**	**GA BOARD,COMPLETE (KV-34FV10/34FV15/34FV15C/34FV15K/34FX250C/38FX250/38FX250C/38FV15K only)**			
	1-533-223-11	HOLDER, FUSE			
	1-923-083-07	WIRE UL1007 AWG24 70MM RED			
*	4-374-846-01	COVER, CAPACITOR, CAP TYPE			
	4-382-854-11	SCREW (M3X10), P, SW (+)			

CAPACITOR

REF.NO.	PART NO.	DESCRIPTION			REMARK
C6001	1-126-933-11	ELECT	100µF	20%	16V
C6002⚠	1-136-346-21	FILM	0.22µF	20%	300V
C6003	1-136-346-21	FILM	0.22µF	20%	300V
C6005⚠	1-119-886-51	CERAMIC	470pF	10%	250V
C6007⚠	1-119-886-51	CERAMIC	470pF	10%	250V
C6008	1-126-960-11	ELECT	1µF	20%	50V
C6009	1-126-961-11	ELECT	2.2µF	20%	50V
C6016	1-104-330-91	CERAMIC	470pF	10%	1KV
C6017⚠	1-130-029-00	FILM	8200pF	2%	50V
C6018	1-102-050-00	CERAMIC	0.01µF	20%	500V
C6019⚠	1-113-611-11	ELECT(BLOCK)	820µF	20%	250V
C6020⚠	1-113-611-11	ELECT(BLOCK)	820µF	20%	250V
C6021	1-126-964-11	ELECT	10µF	20%	50V
C6022⚠	1-126-963-11	ELECT	4.7µF	20%	50V
C6024	1-126-964-11	ELECT	10µF	20%	50V
C6025	1-119-769-11	FILM	0.018µF	3%	1KV
C6026	1-126-964-11	ELECT	10µF	20%	50V
C6027	1-130-471-00	MYLAR	0.001µF	5%	50V
C6028	1-130-471-00	MYLAR	0.001µF	5%	50V
C6029⚠	1-136-165-00	FILM	0.1µF	5%	50V
C6030	1-119-769-11	FILM	0.018µF	3%	1KV
C6031	1-104-330-91	CERAMIC	470pF	10%	1KV
C6032	1-126-960-11	ELECT	1µF	20%	50V
C6035	1-127-794-51	CERAMIC	2200pF	20%	250V
C6036	1-127-794-51	CERAMIC	2200pF	20%	250V
C6037⚠	1-107-679-91	ELECT	10µF	20%	450V
C6038	1-137-370-11	FILM	0.01µF	5%	50V
C6039	1-164-645-11	CERAMIC	1000pF	10%	500V
C6040	1-130-467-00	MYLAR	470pF	5%	50V
C6042	1-130-467-00	MYLAR	470pF	5%	50V
C6043	1-130-471-00	MYLAR	0.001µF	5%	50V
C6044	1-126-936-11	ELECT	3300µF	20%	16V
C6045	1-126-942-61	ELECT	1000µF	20%	25V
C6046	1-128-566-11	ELECT	470µF	20%	100V
C6047	1-128-566-11	ELECT	470µF	20%	100V
C6048	1-164-645-11	CERAMIC	1000pF	10%	500V
C6049	1-128-550-11	ELECT	2200µF	20%	50V
C6050	1-104-664-11	ELECT	47µF	20%	25V
C6051	1-104-664-11	ELECT	47µF	20%	25V
C6052	1-126-971-11	ELECT	470µF	20%	50V
C6053	1-136-165-00	FILM	0.1µF	5%	50V
C6054	1-137-605-11	FILM	0.01µF	10%	250V
C6056	1-130-471-00	MYLAR	0.001µF	5%	50V
C6057	1-107-636-11	ELECT	10µF	20%	160V
C6058	1-126-960-11	ELECT	1µF	20%	50V
C6059	1-104-664-11	ELECT	47µF	20%	25V
C6060	1-104-664-11	ELECT	47µF	20%	25V
C6062	1-126-964-11	ELECT	10µF	20%	50V
C6063	1-126-940-11	ELECT	330µF	20%	25V
C6064	1-104-664-11	ELECT	47µF	20%	25V
C6066	1-126-965-11	ELECT	22µF	20%	50V
C6067	1-102-121-00	CERAMIC	0.0022µF	10%	50V
C6068	1-102-106-00	CERAMIC	100pF	10%	50V
C6069	1-102-106-00	CERAMIC	100pF	10%	50V
C6070	1-102-074-00	CERAMIC	0.001µF	10%	50V
C6071	1-102-106-00	CERAMIC	100pF	10%	50V
C6072	1-102-106-00	CERAMIC	100pF	10%	50V
C6073	1-102-129-00	CERAMIC	0.01µF	10%	50V
C6074	1-102-106-00	CERAMIC	100pF	10%	50V
C6075	1-107-824-11	CERAMIC	220pF	5%	1KV
C6078	1-126-964-11	ELECT	10µF	20%	50V

CONNECTOR

REF.NO.	PART NO.	DESCRIPTION	REMARK
CN6000*	1-573-963-11	PIN, CONNECTOR (PC BOARD)	3P
CN6001*	1-573-963-11	PIN, CONNECTOR (PC BOARD)	3P
CN6002	1-695-915-11	TAB (CONTACT)	
CN6003*	1-580-843-11	PIN, CONNECTOR (POWER)	
CN6006*	1-564-509-11	PLUG, CONNECTOR 6P	
CN6007*	1-564-515-11	PLUG, CONNECTOR 12P	
CN6009	1-695-915-11	TAB (CONTACT)	

DIODE

REF.NO.	PART NO.	DESCRIPTION	REMARK
D6000	8-719-991-33	DIODE 1SS133T-77	
D6001	8-719-991-33	DIODE 1SS133T-77	
D6002	8-719-991-33	DIODE 1SS133T-77	
D6003	8-719-991-33	DIODE 1SS133T-77	
D6004	8-719-991-33	DIODE 1SS133T-77	
D6005	8-719-991-33	DIODE 1SS133T-77	
D6006	8-719-991-33	DIODE 1SS133T-77	
D6008⚠	8-719-510-53	DIODE D4SB60L	
D6009	8-719-991-33	DIODE 1SS133T-77	
D6010	8-719-991-33	DIODE 1SS133T-77	
D6011	8-719-991-33	DIODE 1SS133T-77	
D6012	8-719-991-33	DIODE 1SS133T-77	
D6013⚠	8-719-510-02	DIODE D1NS4	
D6014⚠	8-719-921-88	DIODE MTZJ-13B	
D6015	8-719-979-64	DIODE UF4005PKG23	
D6016	8-719-924-13	DIODE MTZJ-T-77-22B	
D6017	8-719-911-55	DIODE U05G	
D6018	8-719-924-13	DIODE MTZJ-T-77-22B	
D6019	8-719-911-55	DIODE U05G	
D6020⚠	8-719-062-40	DIODE D4SBL20UF3	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

COMPLETE PARTS LISTING

GA

REF.NO.	PART NO.	DESCRIPTION	REMARK
D6021	8-719-110-41	DIODE RD15ESB2	
D6022	8-719-510-12	DIODE D10SC4M	
D6023 ⚠	8-719-022-97	DIODE D2S4MF	
D6024 ⚠	8-719-022-97	DIODE D2S4MF	
D6025 ⚠	8-719-060-89	DIODE D4SBS6-F	
D6028	8-719-110-49	DIODE RD18ESB2	
D6029	8-719-991-33	DIODE 1SS133T-77	
D6030 ⚠	8-719-110-60	DIODE RD24ESB	
D6031	8-719-991-33	DIODE 1SS133T-77	
D6032	8-719-510-48	DIODE D1N20R	
D6034	8-719-948-45	DIODE ERA22-08	
D6035	8-719-063-70	DIODE D1NL20U	
D6036	8-719-032-12	DIODE D1NS6	
D6037	8-719-991-33	DIODE 1SS133T-77	
D6038	8-719-991-33	DIODE 1SS133T-77	
D6040	8-719-063-70	DIODE D1NL20U	
D6041	8-719-991-33	DIODE 1SS133T-77	
D6042	8-719-110-17	DIODE RD10ESB2	
D6043	8-719-991-33	DIODE 1SS133T-77	
D6044	8-719-991-33	DIODE 1SS133T-77	
D6045	8-719-911-55	DIODE U05G	
D6046	8-719-911-55	DIODE U05G	
D6047	8-719-110-31	DIODE RD12ESB2	
D6048	8-719-110-31	DIODE RD12ESB2	
D6049	8-719-991-33	DIODE 1SS133T-77	
D6050 ⚠	8-719-979-64	DIODE UF4005PKG23	
D6051	8-719-063-70	DIODE D1NL20U	
D6052	8-719-110-31	DIODE RD12ESB2	

FUSE

REF.NO.	PART NO.	DESCRIPTION		REMARK
F6001 ⚠	1-532-506-51	FUSE	6.3A/250V	

FERRITE BEAD

REF.NO.	PART NO.	DESCRIPTION	REMARK
FB6001	1-412-911-11	FERRITE	
FB6002	1-412-911-11	FERRITE	
FB6003	1-412-911-11	FERRITE	
FB6004	1-412-911-11	FERRITE	
FB6005	1-412-911-11	FERRITE	
FB6006	1-412-911-11	FERRITE	
FB6007	1-412-911-11	FERRITE	

IC

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC6000	8-759-198-31	IC UPC1093J-1-T	
IC6001 ⚠	8-759-133-90	IC UPC339C	
IC6002 ⚠	8-749-013-78	IC MCR5102	
IC6003	8-749-012-13	IC DM-58	
IC6004	8-759-394-35	IC BA12T	
IC6005	8-759-198-03	IC PQ09RF21	
IC6007	8-759-450-47	IC BA05T	

COIL

REF.NO.	PART NO.	DESCRIPTION		REMARK
L6000	1-412-519-11	INDUCTOR	3.3µH	
L6001	1-412-519-11	INDUCTOR	3.3µH	
L6002	1-412-527-11	INDUCTOR	15µH	
L6003	1-412-527-11	INDUCTOR	15µH	
L6004	1-412-529-11	INDUCTOR	22µH	

PHOTO COUPLER

REF.NO.	PART NO.	DESCRIPTION	REMARK
PH6001 ⚠	8-749-924-35	PHOTO COUPLER ON3171-R	
PH6002 ⚠	8-749-924-35	PHOTO COUPLER ON3171-R	

TRANSISTOR

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q6000	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q6001	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q6002	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q6003	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q6004	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q6005	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q6006 ⚠	8-729-046-40	TRANSISTOR 2SK2663	
Q6007	8-729-922-39	TRANSISTOR 2SD2144S-V	
Q6008	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q6009	8-729-048-82	TRANSISTOR 2SA821STPQ	
Q6010	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q6011 ⚠	8-729-140-93	TRANSISTOR 2SB733-34	
Q6012	8-729-119-76	TRANSISTOR 2SA1175-HFE	

RESISTOR

REF.NO.	PART NO.	DESCRIPTION				REMARK
R6000	1-215-445-00	METAL	10K	1%	1/4W	
R6001	1-215-445-00	METAL	10K	1%	1/4W	
R6002	1-202-727-00	SOLID	4.7M	20%	1/2W	
R6003	1-249-425-11	CARBON	4.7K	5%	1/4W	
R6004	1-247-843-11	CARBON	3.3K	5%	1/4W	
R6005	1-215-469-00	METAL	100K	1%	1/4W	
R6006	1-215-471-00	METAL	120K	1%	1/4W	
R6007	1-247-843-11	CARBON	3.3K	5%	1/4W	
R6008	1-215-469-00	METAL	100K	1%	1/4W	
R6009	1-215-483-00	METAL	390K	1%	1/4W	
R6010	1-249-393-11	CARBON	10	5%	1/4W	F
R6011	1-215-466-00	METAL	75K	1%	1/4W	
R6012	1-215-489-00	METAL	680K	1%	1/4W	
R6013	1-215-489-00	METAL	680K	1%	1/4W	
R6014	1-215-489-00	METAL	680K	1%	1/4W	
R6015	1-215-485-00	METAL	470K	1%	1/4W	
R6016	1-215-471-00	METAL	120K	1%	1/4W	
R6017	1-215-489-00	METAL	680K	1%	1/4W	
R6018	1-215-489-00	METAL	680K	1%	1/4W	
R6019	1-215-489-00	METAL	680K	1%	1/4W	
R6020 ⚠	1-218-265-11	METAL	8.2M	5%	1W	
R6021	1-215-466-00	METAL	75K	1%	1/4W	
R6022	1-215-469-00	METAL	100K	1%	1/4W	
R6023	1-215-465-00	METAL	68K	1%	1/4W	

GA COMPLETE PARTS LISTING

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

REF.NO.	PART NO.	DESCRIPTION			REMARK
R6024	1-215-457-00	METAL	33K	1%	1/4W
R6025	1-215-473-00	METAL	150K	1%	1/4W
R6026	1-215-466-00	METAL	75K	1%	1/4W
R6027	1-215-489-00	METAL	680K	1%	1/4W
R6028	1-215-489-00	METAL	680K	1%	1/4W
R6029	1-215-489-00	METAL	680K	1%	1/4W
R6030	1-215-458-00	METAL	36K	1%	1/4W
R6031	1-215-489-00	METAL	680K	1%	1/4W
R6032	1-215-489-00	METAL	680K	1%	1/4W
R6033	1-215-489-00	METAL	680K	1%	1/4W
R6034	1-215-463-00	METAL	56K	1%	1/4W
R6035	1-249-429-11	CARBON	10K	5%	1/4W
R6036	1-215-481-00	METAL	330K	1%	1/4W
R6037	1-249-439-11	CARBON	68K	5%	1/4W
R6038	1-215-481-00	METAL	330K	1%	1/4W
R6039⚠	1-240-876-11	CEMENTED	1	5%	15W
R6040⚠	1-240-876-11	CEMENTED	1	5%	15W
R6041	1-219-512-11	CARBON	2.2M	5%	1/2W
R6042	1-247-863-91	CARBON	22K	5%	1/4W
R6044⚠	1-215-430-00	METAL	2.4K	1%	1/4W
R6045	1-215-448-00	METAL	13K	1%	1/4W
R6046	1-247-863-91	CARBON	22K	5%	1/4W
R6047	1-215-481-00	METAL	330K	1%	1/4W
R6048⚠	1-260-131-11	CARBON	470K	5%	1/2W
R6049⚠	1-260-131-11	CARBON	470K	5%	1/2W
R6050	1-249-425-11	CARBON	4.7K	5%	1/4W
R6051⚠	1-202-933-61	FUSIBLE	0.1	10%	1/2W F
R6052	1-249-429-11	CARBON	10K	5%	1/4W
R6053	1-249-425-11	CARBON	4.7K	5%	1/4W
R6054	1-249-437-11	CARBON	47K	5%	1/4W
R6055	1-249-429-11	CARBON	10K	5%	1/4W
R6056	1-215-421-00	METAL	1K	1%	1/4W
R6057	1-249-429-11	CARBON	10K	5%	1/4W
R6058⚠	1-216-381-11	METAL OXIDE	0.22	5%	3W F
R6059	1-215-864-00	METAL OXIDE	150	5%	1W F
R6060⚠	1-216-381-11	METAL OXIDE	0.22	5%	3W F
R6062	1-219-512-11	CARBON	2.2M	5%	1/2W
R6063	1-215-421-00	METAL	1K	1%	1/4W
R6064⚠	1-247-815-91	CARBON	220	5%	1/4W
R6065	1-247-815-91	CARBON	220	5%	1/4W
R6066	1-249-389-11	CARBON	4.7	5%	1/4W F
R6067	1-249-421-11	CARBON	2.2K	5%	1/4W
R6068	1-249-417-11	CARBON	1K	5%	1/4W
R6069	1-249-437-11	CARBON	47K	5%	1/4W
R6071	1-249-425-11	CARBON	4.7K	5%	1/4W
R6072	1-247-815-91	CARBON	220	5%	1/4W
R6073	1-260-298-51	CARBON	3.3	5%	1/2W F
R6074	1-249-415-11	CARBON	680	5%	1/4W
R6075	1-260-312-11	CARBON	47	5%	1/2W
R6076	1-260-312-11	CARBON	47	5%	1/2W
R6077	1-247-791-91	CARBON	22	5%	1/4W
R6078⚠	1-249-389-11	CARBON	4.7	5%	1/4W F
R6079	1-247-815-91	CARBON	220	5%	1/4W

REF.NO.	PART NO.	DESCRIPTION			REMARK
R6080	1-249-421-11	CARBON	2.2K	5%	1/4W
R6081⚠	1-249-387-11	CARBON	3.3	5%	1/2W F
R6082	1-215-461-00	METAL	47K	1%	1/4W
R6083	1-249-441-11	CARBON	100K	5%	1/4W
R6084	1-249-413-11	CARBON	470	5%	1/4W
R6085	1-215-462-00	METAL	51K	1%	1/4W
R6086	1-215-479-00	METAL	270K	1%	1/4W
R6087	1-240-205-91	CARBON	22M	5%	1/2W
R6088⚠	1-249-417-11	CARBON	1K	5%	1/4W F
R6089	1-215-493-00	METAL	1M	1%	1/4W
R6091	1-215-469-00	METAL	100K	1%	1/4W
R6092	1-215-481-00	METAL	330K	1%	1/4W
R6093	1-249-427-11	CARBON	6.8K	5%	1/4W
R6094	1-215-423-00	METAL	1.2K	1%	1/4W
R6095⚠	1-216-363-00	METAL OXIDE	0.33	5%	2W F
R6096	1-249-421-11	CARBON	2.2K	5%	1/4W
R6097	1-215-485-00	METAL	470K	1%	1/4W
R6098	1-215-445-00	METAL	10K	1%	1/4W
R6099	1-215-469-00	METAL	100K	1%	1/4W
R6100	1-249-429-11	CARBON	10K	5%	1/4W
R6101	1-249-417-11	CARBON	1K	5%	1/4W
R6102	1-247-895-91	CARBON	470K	5%	1/4W
R6103	1-205-998-11	CEMENTED	1	5%	10W
R6104	1-249-429-11	CARBON	10K	5%	1/4W
R6105	1-249-429-11	CARBON	10K	5%	1/4W
R6106	1-202-962-11	CEMENTED	3.3	5%	10W
R6107	1-202-962-11	CEMENTED	3.3	5%	10W
R6109	1-249-437-11	CARBON	47K	5%	1/4W
R6111	1-215-857-11	METAL OXIDE	10	5%	1W F
R6112	1-215-857-11	METAL OXIDE	10	5%	1W F

RELAY

REF.NO.	PART NO.	DESCRIPTION	REMARK
RY6000⚠	1-755-146-11	RELAY, AC POWER	
RY6001⚠	1-755-330-11	RELAY, AC POWER	
RY6002⚠	1-755-330-11	RELAY, AC POWER	

TRANSFORMER

REF.NO.	PART NO.	DESCRIPTION	REMARK
T6000⚠	1-433-900-11	TRANSFORMER, LINE FILTER	
T6001⚠	1-433-900-11	TRANSFORMER, LINE FILTER	
T6002⚠	1-433-846-11	TRANSFORMER, CONVERTER	(PIT)
T6003⚠	1-433-844-11	TRANSFORMER, CONVERTER	

THERMISTOR

REF.NO.	PART NO.	DESCRIPTION	REMARK
TH6000⚠	1-803-540-11	THERMISTOR	
TH6001⚠	1-803-629-11	THERMISTOR, POSITIVE	
TH6002	1-803-586-11	THERMISTOR	

VARISTOR

REF.NO.	PART NO.	DESCRIPTION	REMARK
VD6000⚠	1-803-587-11	VARISTOR	
VD6002⚠	1-803-614-11	VARISTOR	

HA

*** A-1372-634-A HA BOARD, COMPLETE (All Models)**

CAPACITOR

REF.NO.	PART NO.	DESCRIPTION				REMARK
C1234	1-126-960-11	ELECT	1µF	20%	50V	
C1235	1-126-960-11	ELECT	1µF	20%	50V	
C1239	1-216-295-91	SHORT				

CONNECTOR

REF.NO.	PART NO.	DESCRIPTION	REMARK
CN1232	*1-564-512-11	PLUG, CONNECTOR 9P	

DIODE

REF.NO.	PART NO.	DESCRIPTION	REMARK
D1233	8-719-110-17	DIODE MTZJ-T-77-10B	

JACK

REF.NO.	PART NO.	DESCRIPTION	REMARK
J1231	1-770-361-11	TERMINAL BLOCK, S	

RESISTOR

REF.NO.	PART NO.	DESCRIPTION				REMARK
R201	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R202	1-216-055-00	RES, CHIP	1.8K	5%	1/10W	
R203	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	
R1233	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	
R1235	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	
R1236	1-216-113-00	RES, CHIP	470K	5%	1/10W	
R1237	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	
R1238	1-216-113-00	RES, CHIP	470K	5%	1/10W	

SWITCH

REF.NO.	PART NO.	DESCRIPTION	REMARK
S2007	1-572-198-11	SWITCH, KEYBOARD	
S2008	1-572-198-11	SWITCH, KEYBOARD	
S2009	1-572-198-11	SWITCH, KEYBOARD	
S2010	1-572-198-11	SWITCH, KEYBOARD	

HB

*** A-1372-635-A HB BOARD, COMPLETE (All Models)**

CAPACITOR

REF.NO.	PART NO.	DESCRIPTION				REMARK
C2001	1-104-665-11	ELECT	100µF	20%	25V	

CONNECTOR

REF.NO.	PART NO.	DESCRIPTION	REMARK
CN2001	*1-564-520-11	PLUG, CONNECTOR 5P	

DIODE

REF.NO.	PART NO.	DESCRIPTION	REMARK
D2002	8-719-057-09	DIODE LNJ801LPDJA	
D2003	8-719-057-09	DIODE LNJ801LPDJA	

IC

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC2001	8-742-088-10	HYB IC SBX1780-51	

RESISTOR

REF.NO.	PART NO.	DESCRIPTION				REMARK
R2001	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R2002	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R2003	1-216-017-91	RES, CHIP	47	5%	1/10W	

HX

*** A-1372-636-A HX BOARD, COMPLETE (All Models)**

CONNECTOR

REF.NO.	PART NO.	DESCRIPTION	REMARK
CN2002	*1-564-518-11	PLUG, CONNECTOR 3P	

RESISTOR

REF.NO.	PART NO.	DESCRIPTION				REMARK
R2010	1-216-047-91	RES, CHIP	820	5%	1/10W	
R2011	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R2012	1-216-055-00	RES, CHIP	1.8K	5%	1/10W	
R2013	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	
R2014	1-216-025-91	RES, CHIP	100	5%	1/10W	

SWITCH

REF.NO.	PART NO.	DESCRIPTION	REMARK
S2001	1-572-198-11	SWITCH, KEYBOARD	
S2002	1-572-198-11	SWITCH, KEYBOARD	
S2003	1-572-198-11	SWITCH, KEYBOARD	
S2004	1-572-198-11	SWITCH, KEYBOARD	
S2005	1-572-198-11	SWITCH, KEYBOARD	
S2006	1-572-198-11	SWITCH, KEYBOARD	

T COMPLETE PARTS LISTING

T

*** A-1394-934-A T BOARD, COMPLETE**
(KV32XBR250/34FX250C/36XBR250/38FX250/38FX250C/38FX250T only)

CAPACITOR

REF.NO.	PART NO.	DESCRIPTION			REMARK
C401	1-163-243-11	CERAMIC CHIP	47pF	5%	50V
C402	1-163-035-00	CERAMIC CHIP	0.047µF		50V
C403	1-126-963-11	ELECT	4.7µF	20%	50V
C404	1-163-135-00	CERAMIC CHIP	560pF	5%	50V
C405	1-104-664-11	ELECT	47µF	20%	25V
C406	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C407	1-163-035-00	CERAMIC CHIP	0.047µF		50V
C408	1-163-135-00	CERAMIC CHIP	560pF	5%	50V
C409	1-126-963-11	ELECT	4.7µF	20%	50V
C410	1-163-243-11	CERAMIC CHIP	47pF	5%	50V
C411	1-126-963-11	ELECT	4.7µF	20%	50V
C412	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C413	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C414	1-104-664-11	ELECT	47µF	20%	25V
C415	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C416	1-104-664-11	ELECT	47µF	20%	25V
C417	1-126-963-11	ELECT	4.7µF	20%	50V
C418	1-163-229-11	CERAMIC CHIP	12pF	5%	50V
C419	1-163-227-11	CERAMIC CHIP	10pF	0.5pF	50V
C420	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C421	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C422	1-104-664-11	ELECT	47µF	20%	25V
C423	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C424	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C425	1-104-664-11	ELECT	47µF	20%	25V
C426	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V

CONNECTOR

REF.NO.	PART NO.	DESCRIPTION
CN401	*1-564-519-11	PLUG, CONNECTOR 4P

DIODE

REF.NO.	PART NO.	DESCRIPTION
D401	8-719-109-89	DIODE RD5.6ESB2
D402	8-719-057-93	DIODE SVC203SPA-AL
D403	8-719-057-93	DIODE SVC203SPA-AL
D404	8-719-992-13	DIODE DAL5815
D405	8-719-992-13	DIODE DAL5815
D406	8-719-992-13	DIODE DAL5815
D407	8-719-992-13	DIODE DAL5815
D408	8-719-992-13	DIODE DAL5815
D409	8-719-992-13	DIODE DAL5815
D410	8-719-992-13	DIODE DAL5815
D411	8-719-992-13	DIODE DAL5815

IC

REF.NO.	PART NO.	DESCRIPTION
IC401	8-759-939-73	IC BA3308

COIL

REF.NO.	PART NO.	DESCRIPTION
L401	1-411-987-11	COIL (OSC)
L402	1-411-988-11	COIL (OSC)

TRANSISTOR

REF.NO.	PART NO.	DESCRIPTION
Q401	8-729-266-83	TRANSISTOR 2SC2668-Y
Q402	8-729-266-83	TRANSISTOR 2SC2668-Y
Q403	8-729-119-78	TRANSISTOR 2SC3311A-QRSTA
Q404	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX
Q405	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX
Q406	8-729-931-14	TRANSISTOR 2SD1858-Q-TV2
Q407	8-729-931-14	TRANSISTOR 2SD1858-Q-TV2
Q408	8-729-931-14	TRANSISTOR 2SD1858-Q-TV2
Q409	8-729-931-14	TRANSISTOR 2SD1858-Q-TV2
Q410	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX
Q411	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX

RESISTOR

REF.NO.	PART NO.	DESCRIPTION			REMARK
R401	1-216-089-91	RES, CHIP	47K	5%	1/10W
R402	1-216-089-91	RES, CHIP	47K	5%	1/10W
R403	1-216-089-91	RES, CHIP	47K	5%	1/10W
R404	1-216-053-00	RES, CHIP	1.5K	5%	1/10W
R405	1-216-025-91	RES, CHIP	100	5%	1/10W
R406	1-216-053-00	RES, CHIP	1.5K	5%	1/10W
R407	1-216-133-00	RES, CHIP	3.3M	5%	1/10W
R408	1-216-089-91	RES, CHIP	47K	5%	1/10W
R409	1-216-053-00	RES, CHIP	1.5K	5%	1/10W
R410	1-216-053-00	RES, CHIP	1.5K	5%	1/10W
R411	1-216-025-91	RES, CHIP	100	5%	1/10W
R412	1-208-803-11	RES, CHIP	7.5K	0.50%	1/10W
R413	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R414	1-216-073-00	RES, CHIP	10K	5%	1/10W
R415	1-249-416-11	CARBON	820	5%	1/4W
R416	1-216-081-00	RES, CHIP	22K	5%	1/10W
R417	1-216-081-00	RES, CHIP	22K	5%	1/10W
R418	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R419	1-216-073-00	RES, CHIP	10K	5%	1/10W
R420	1-216-111-00	RES, CHIP	390K	5%	1/10W
R421	1-216-025-91	RES, CHIP	100	5%	1/10W
R422	1-216-025-91	RES, CHIP	100	5%	1/10W
R423	1-216-111-00	RES, CHIP	390K	5%	1/10W
R424	1-216-053-00	RES, CHIP	1.5K	5%	1/10W
R425	1-216-061-00	RES, CHIP	3.3K	5%	1/10W
R426	1-208-821-11	RES, CHIP	43K	0.50%	1/10W
R427	1-216-061-00	RES, CHIP	3.3K	5%	1/10W
R428	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R429	1-216-057-00	RES, CHIP	2.2K	5%	1/10W

REF.NO.	PART NO.	DESCRIPTION			REMARK
R430	1-208-794-11	RES, CHIP	3.3K	0.50%	1/10W
R431	1-208-794-11	RES, CHIP	3.3K	0.50%	1/10W
R432	1-208-821-11	RES, CHIP	43K	0.50%	1/10W
R433	1-216-059-00	RES, CHIP	2.7K	5%	1/10W
R434	1-216-059-00	RES, CHIP	2.7K	5%	1/10W
R435	1-216-001-00	RES, CHIP	10	5%	1/10W
R436	1-216-001-00	RES, CHIP	10	5%	1/10W
R437	1-216-001-00	RES, CHIP	10	5%	1/10W
R438	1-216-001-00	RES, CHIP	10	5%	1/10W
R439	1-216-059-00	RES, CHIP	2.7K	5%	1/10W
R460	1-216-059-00	RES, CHIP	2.7K	5%	1/10W

REF.NO. PART NO. DESCRIPTION REMARK

UX

MAIN SCHEMATIC (FOR UX PIP COMPONENTS SEE PAGE 112)

- * **A-1394-947-A UX BOARD, COMPLETE (KV-32XBR250/36XBR250 only)**
- * **A-1394-948-A UX BOARD, COMPLETE (KV-34FX250C/38FX250/38FX250C/38FX250T only)**

CAPACITOR

REF.NO.	PART NO.	DESCRIPTION			REMARK
C201	1-128-551-11	ELECT	22µF	20%	25V
C202	1-128-551-11	ELECT	22µF	20%	25V
C203	1-128-551-11	ELECT	22µF	20%	25V
C204	1-126-960-11	ELECT	1µF	20%	50V
C205	1-126-960-11	ELECT	1µF	20%	50V
C231	1-163-021-91	CERAMIC	0.01µF	10%	50V
C232	1-126-933-11	ELECT	100µF	20%	16V
C233	1-126-933-11	ELECT	100µF	20%	16V
C234	1-126-960-11	ELECT	1µF	20%	50V
C235	1-126-960-11	ELECT	1µF	20%	50V
C236	1-126-933-11	ELECT	100µF	20%	16V
C237	1-126-960-11	ELECT	1µF	20%	50V
C238	1-126-960-11	ELECT	1µF	20%	50V
C241	1-126-941-11	ELECT	470µF	20%	25V
C242	1-126-959-11	ELECT	0.47µF	20%	50V
C243	1-126-959-11	ELECT	0.47µF	20%	50V
C244	1-126-959-11	ELECT	0.47µF	20%	50V
C245	1-126-959-11	ELECT	0.47µF	20%	50V
C247	1-126-941-11	ELECT	470µF	20%	25V
C248	1-126-959-11	ELECT	0.47µF	20%	50V
C249	1-126-959-11	ELECT	0.47µF	20%	50V
C264	1-164-004-11	CERAMIC	0.1µF	10%	25V
C268	1-163-021-91	CERAMIC	0.01µF	10%	50V
C269	1-163-021-91	CERAMIC	0.01µF	10%	50V
C272	1-163-231-11	CERAMIC	15pF	5%	50V
C273	1-128-551-11	ELECT	22µF	20%	25V
C277	1-128-551-11	ELECT	22µF	20%	25V
C278	1-128-551-11	ELECT	22µF	20%	25V
C281	1-126-933-11	ELECT	100µF	20%	16V
C284	1-126-941-11	ELECT	470µF	20%	25V
C286	1-164-161-11	CERAMIC	0.0022µF	10%	50V
C287	1-164-161-11	CERAMIC	0.0022µF	10%	50V
C1051	1-126-964-11	ELECT	10µF	20%	50V
C1053	1-104-665-11	ELECT	100µF	20%	25V
C1201	1-163-809-11	CERAMIC	0.047µF	10%	25V
C1202	1-163-021-91	CERAMIC	0.01µF	10%	50V
C1203	1-126-960-11	ELECT	1µF	20%	50V
C1204	1-163-809-11	CERAMIC	0.047µF	10%	25V
C1205	1-126-933-11	ELECT	100µF	20%	16V
C1207	1-126-963-11	ELECT	4.7µF	20%	50V
C1208	1-126-963-11	ELECT	4.7µF	20%	50V
C1209	1-163-259-91	CERAMIC	220pF	5%	50V
C1210	1-163-259-91	CERAMIC	220pF	5%	50V
C1211	1-126-933-11	ELECT	100µF	20%	16V
C1212	1-126-933-11	ELECT	100µF	20%	16V
C1213	1-126-941-11	ELECT	470µF	20%	25V
C1214	1-163-021-91	CERAMIC	0.01µF	10%	50V
C1215	1-126-960-11	ELECT	1µF	20%	50V
C2000	1-126-941-11	ELECT	470µF	20%	25V
C2001	1-163-235-11	CERAMIC	22pF	5%	50V
C2002	1-165-319-11	CERAMIC	0.1µF		50V
C2003	1-163-031-11	CERAMIC	0.01µF		50V
C2004	1-163-235-11	CERAMIC	22pF	5%	50V
C2005	1-163-131-00	CERAMIC	390pF	5%	50V
C2006	1-163-038-91	CERAMIC	0.1µF		25V
C2007	1-126-926-11	ELECT	1000µF	20%	10V
C2008	1-163-038-91	CERAMIC	0.1µF		25V
C2009	1-163-102-00	CERAMIC	24pF	5%	50V
C2012	1-163-031-11	CERAMIC	0.01µF		50V
C2013	1-163-038-91	CERAMIC	0.1µF		25V
C2014	1-163-009-11	CERAMIC	0.001µF	10%	50V
C2015	1-163-021-91	CERAMIC	0.01µF	10%	50V
C2016	1-165-319-11	CERAMIC	0.1µF		50V
C2017	1-163-102-00	CERAMIC	24pF	5%	50V
C2018	1-165-319-11	CERAMIC	0.1µF		50V
C2019	1-126-960-11	ELECT	1µF	20%	50V
C2020	1-165-319-11	CERAMIC	0.1µF		50V
C2021	1-163-038-91	CERAMIC	0.1µF		25V
C2022	1-126-933-11	ELECT	100µF	20%	16V
C2029	1-165-319-11	CERAMIC	0.1µF		50V
C2030	1-165-319-11	CERAMIC	0.1µF		50V
C2031	1-165-319-11	CERAMIC	0.1µF		50V
C2032	1-165-319-11	CERAMIC	0.1µF		50V
C2033	1-165-319-11	CERAMIC	0.1µF		50V
C2034	1-165-319-11	CERAMIC	0.1µF		50V
C2035	1-165-319-11	CERAMIC	0.1µF		50V
C2036	1-165-319-11	CERAMIC	0.1µF		50V
C2038	1-165-319-11	CERAMIC	0.1µF		50V
C2041	1-104-665-11	ELECT	100µF	20%	25V
C2042	1-165-319-11	CERAMIC	0.1µF		50V
C2044	1-104-664-11	ELECT	47µF	20%	16V
C2045	1-163-233-11	CERAMIC	18pF	5%	50V
C2046	1-126-964-11	ELECT	10µF	20%	50V
C2047	1-126-961-11	ELECT	2.2µF	20%	50V
C2048	1-126-964-11	ELECT	10µF	20%	50V
C2050	1-163-231-11	CERAMIC	15pF	5%	50V
C2051	1-126-964-11	ELECT	10µF	20%	50V
C2052	1-163-133-00	CERAMIC	470pF	5%	50V
C2053	1-126-960-11	ELECT	1µF	20%	50V
C2054	1-104-664-11	ELECT	47µF	20%	16V
C2057	1-163-031-11	CERAMIC	0.01µF		50V
C2058	1-163-235-11	CERAMIC	22pF	5%	50V
C2060	1-163-031-11	CERAMIC	0.01µF	50V	
C2062	1-104-664-11	ELECT	47µF	20%	16V
C2063	1-165-319-11	CERAMIC	0.1µF		50V
C2064	1-163-031-11	CERAMIC	0.01µF		50V
C2065	1-163-031-11	CERAMIC	0.01µF		50V
C2066	1-104-664-11	ELECT	47µF	20%	16V
C2067	1-104-664-11	ELECT	47µF	20%	16V

REF.NO.	PART NO.	DESCRIPTION			REMARK
C2068	1-104-664-11	ELECT	47µF	20%	16V
C2069	1-163-031-11	CERAMIC	0.01µF		50V
C2070	1-104-664-11	ELECT	47µF	20%	16V
C2071	1-165-319-11	CERAMIC	0.1µF		50V
C2072	1-126-933-11	ELECT	100µF	20%	16V
C2073	1-163-275-11	CERAMIC	0.001µF	5%	50V
C2074	1-163-275-11	CERAMIC	0.001µF	5%	50V
C2081	1-126-960-11	ELECT	1µF	20%	50V
C2082	1-165-319-11	CERAMIC	0.1µF		50V
C2083	1-163-031-11	CERAMIC	0.01µF		50V
C2084	1-126-964-11	ELECT	10µF	20%	50V
C2085	1-163-031-11	CERAMIC	0.01µF		50V
C2086	1-126-961-11	ELECT	2.2µF	20%	50V
C2087	1-165-319-11	CERAMIC	0.1µF		50V
C2088	1-163-031-11	CERAMIC	0.01µF		50V
C2089	1-126-967-11	ELECT	47µF	20%	50V
C2090	1-165-319-11	CERAMIC	0.1µF		50V
C2091	1-126-964-11	ELECT	10µF	20%	50V
C2095	1-163-231-11	CERAMIC	15pF	5%	50V
C2096	1-163-231-11	CERAMIC	15pF	5%	50V
C2097	1-163-231-11	CERAMIC	15pF	5%	50V
C2139	1-163-113-00	CERAMIC	68pF	5%	50V
C2154	1-104-664-11	ELECT	47µF	20%	16V
C2167	1-126-964-11	ELECT	10µF	20%	50V
C2201	1-126-965-11	ELECT	22µF	20%	50V
C2202	1-126-933-11	ELECT	100µF	20%	16V
C2203	1-163-021-91	CERAMIC	0.01µF	10%	50V

CONNECTOR

CN261	1-564-510-11	PLUG, CONNECTOR	7P
CN262	1-691-632-21	CONNECTOR, BOARD TO BOARD	15P
CN263	1-691-632-21	CONNECTOR, BOARD TO BOARD	15P
CN264	1-691-632-21	CONNECTOR, BOARD TO BOARD	15P
CN265	1-564-513-11	PLUG, CONNECTOR	10P

DIODE

D201	8-719-032-47	DIODE MTZJ-T-9110
D202	8-719-032-47	DIODE MTZJ-T-9110
D203	8-719-032-47	DIODE MTZJ-T-9110
D204	8-719-032-47	DIODE MTZJ-T-9110
D205	8-719-032-47	DIODE MTZJ-T-9110
D231	8-719-032-47	DIODE MTZJ-T-9110
D232	8-719-032-47	DIODE MTZJ-T-9110
D233	8-719-032-47	DIODE MTZJ-T-9110
D234	8-719-032-47	DIODE MTZJ-T-9110
D235	8-719-032-47	DIODE MTZJ-T-9110
D236	8-719-032-47	DIODE MTZJ-T-9110
D237	8-719-032-47	DIODE MTZJ-T-9110
D238	8-719-032-47	DIODE MTZJ-T-9110
D239	8-719-032-47	DIODE MTZJ-T-9110
D245	8-719-157-94	DIODE RD3.3SB
D246	8-719-157-94	DIODE RD3.3SB
D247	8-719-157-94	DIODE RD3.3SB
D248	8-719-157-94	DIODE RD3.3SB
D249	8-719-157-94	DIODE RD3.3SB
D250	8-719-157-94	DIODE RD3.3SB
D261	8-719-032-47	DIODE MTZJ-T-9110
D902	8-719-032-47	DIODE MTZJ-T-9110
D910	8-719-032-47	DIODE MTZJ-T-9110
D911	8-719-032-47	DIODE MTZJ-T-9110
D912	8-719-032-47	DIODE MTZJ-T-9110
D1051	8-719-404-50	DIODE MA111-TX
D1052	8-719-404-50	DIODE MA111-TX
D2005	8-719-404-50	DIODE MA111-TX
D2201	8-719-032-47	DIODE MTZJ-T-9110
D2202	8-719-032-47	DIODE MTZJ-T-9110
D2203	8-719-032-47	DIODE MTZJ-T-9110

FERRITE BEAD

FB2001	1-414-234-22	INDUCTOR
FB2002	1-414-234-22	INDUCTOR
FB2003	1-414-234-22	INDUCTOR
FB2004	1-414-230-22	INDUCTOR
FB2005	1-414-230-22	INDUCTOR
FB2009	1-414-233-22	INDUCTOR
FB2029	1-216-295-91	SHORT
FB2101	1-216-295-91	SHORT

FILTER

FL2001	1-239-847-11	FILTER, LOW PASS
FL2002	1-239-847-11	FILTER, LOW PASS
FL2003	1-239-847-11	FILTER, LOW PASS
FL2004	1-239-847-11	FILTER, LOW PASS

IC

IC261	8-752-066-69	IC CXA1845Q
IC1051	8-752-058-68	IC CXA1315M
IC2003	8-759-568-27	IC MSM514265C-60JSDR1
IC2004	8-759-536-12	IC UPD64081BGF-3BA
IC2005	8-759-591-79	IC UPC2933T-E1
IC2006	8-759-358-38	IC NJM78M05DLA(TE1)
IC2007	8-759-161-24	IC UPC659AGS-E2
IC2009	8-752-395-12	IC CXD2085M

JACK

J231	1-750-515-11	TERMINAL BLOCK, S	3P
J232	1-750-517-11	JACK BLOCK, PIN	3P
J233	1-750-516-11	JACK BLOCK, PIN	2P
J234	1-750-517-11	JACK BLOCK, PIN	3P
J235	1-750-517-11	JACK BLOCK, PIN	3P
J236	1-774-358-11	JACK BLOCK, PIN	
J902	1-764-143-11	JACK	3P

UX COMPLETE PARTS LISTING

REF.NO.	PART NO.	DESCRIPTION	REMARK
J903	1-764-143-11	JACK 3P	
J904	1-764-143-11	JACK 3P	
J905	1-764-143-11	JACK 3P	

CHIP CONDUCTOR

REF.NO.	PART NO.	DESCRIPTION	REMARK
JR1001	1-216-295-91	SHORT	
JR1002	1-216-295-91	SHORT	
JR1003	1-216-295-91	SHORT	
JR1004	1-216-295-91	SHORT	
JR1021	1-216-295-91	SHORT	
JR1022	1-216-295-91	SHORT	
JR1023	1-216-295-91	SHORT	
JR2007	1-216-295-91	SHORT	
JR2008	1-216-295-91	SHORT	
JR2009	1-216-295-91	SHORT	
JR2010	1-216-295-91	SHORT	
JR2011	1-216-295-91	SHORT	
JR2012	1-216-295-91	SHORT	
JR2013	1-216-295-91	SHORT	
JR2014	1-216-295-91	SHORT	

COIL

REF.NO.	PART NO.	DESCRIPTION	REMARK
L261	1-414-857-11	INDUCTOR 100µH	
L1201	1-408-397-00	INDUCTOR 1µH	
L1202	1-408-397-00	INDUCTOR 1µH	
L1203	1-408-397-00	INDUCTOR 1µH	
L2001	1-410-466-41	INDUCTOR 4.7µH	
L2002	1-414-856-11	INDUCTOR 10µH	
L2003	1-414-856-11	INDUCTOR 10µH	
L2004	1-410-473-11	INDUCTOR 18µH	
L2006	1-414-856-11	INDUCTOR 10µH	
L2007	1-414-857-11	INDUCTOR 100µH	
L2008	1-414-856-11	INDUCTOR 10µH	
L2009	1-414-856-11	INDUCTOR 10µH	
L2010	1-410-494-11	INDUCTOR 1mH	
L2011	1-410-116-11	INDUCTOR 560µH	
L2012	1-410-116-11	INDUCTOR 560µH	
L2013	1-410-462-11	INDUCTOR 2.2µH	
L2014	1-410-462-11	INDUCTOR 2.2µH	

TRANSISTOR

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q202	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q203	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q205	8-729-216-22	TRANSISTOR 2SA1162-G	
Q206	8-729-216-22	TRANSISTOR 2SA1162-G	
Q208	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q209	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q210	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q211	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q231	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q233	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q234	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q235	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q236	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q237	8-729-216-22	TRANSISTOR 2SA1162-G	
Q238	8-729-216-22	TRANSISTOR 2SA1162-G	
Q239	8-729-216-22	TRANSISTOR 2SA1162-G	
Q240	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q241	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q242	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q243	8-729-216-22	TRANSISTOR 2SA1162-G	
Q244	8-729-216-22	TRANSISTOR 2SA1162-G	
Q245	8-729-216-22	TRANSISTOR 2SA1162-G	
Q246	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q262	8-729-216-22	TRANSISTOR 2SA1162-G	
Q263	8-729-216-22	TRANSISTOR 2SA1162-G	
Q264	8-729-216-22	TRANSISTOR 2SA1162-G	
Q265	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q267	8-729-216-22	TRANSISTOR 2SA1162-G	
Q268	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1051	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1201	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1202	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1203	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1204	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1205	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1206	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1207	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1208	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1405	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1406	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2001	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q2003	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2004	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2005	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q2006	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q2007	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q2008	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q2009	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q2010	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q2011	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q2012	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2013	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2014	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q2015	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q2016	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q2017	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q2018	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2019	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q2119	8-729-216-22	TRANSISTOR 2SA1162-G	

RESISTOR

REF.NO.	PART NO.	DESCRIPTION			REMARK
R201	1-216-022-00	RES, CHIP 75	5%	1/10W	
R202	1-216-022-00	RES, CHIP 75	5%	1/10W	
R203	1-216-022-00	RES, CHIP 75	5%	1/10W	

REF.NO.	PART NO.	DESCRIPTION			REMARK	
R204	1-216-113-00	RES, CHIP	470K	5%	1/10W	
R205	1-216-113-00	RES, CHIP	470K	5%	1/10W	
R206	1-216-295-91	SHORT				
R207	1-216-295-91	SHORT				
R208	1-216-295-91	SHORT				
R209	1-216-089-91	RES, CHIP	47K	5%	1/10W	
R210	1-216-081-00	RES, CHIP	22K	5%	1/10W	
R211	1-216-089-91	RES, CHIP	47K	5%	1/10W	
R212	1-216-081-00	RES, CHIP	22K	5%	1/10W	
R213	1-216-089-91	RES, CHIP	47K	5%	1/10W	
R214	1-216-081-00	RES, CHIP	22K	5%	1/10W	
R218	1-208-774-11	RES, CHIP	470	0.50%	1/10W	
R219	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R220	1-208-776-11	RES, CHIP	560	0.50%	1/10W	
R221	1-208-774-11	RES, CHIP	470	0.50%	1/10W	
R222	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R223	1-208-776-11	RES, CHIP	560	0.50%	1/10W	
R225	1-216-025-91	RES, CHIP	100	5%	1/10W	
R226	1-216-025-91	RES, CHIP	100	5%	1/10W	
R228	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R229	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R230	1-216-089-91	RES, CHIP	47K	5%	1/10W	
R231	1-216-022-00	RES, CHIP	75	5%	1/10W	
R232	1-216-022-00	RES, CHIP	75	5%	1/10W	
R233	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	
R234	1-216-022-00	RES, CHIP	75	5%	1/10W	
R235	1-216-113-00	RES, CHIP	470K	5%	1/10W	
R236	1-216-113-00	RES, CHIP	470K	5%	1/10W	
R237	1-216-022-00	RES, CHIP	75	5%	1/10W	
R238	1-216-113-00	RES, CHIP	470K	5%	1/10W	
R239	1-216-113-00	RES, CHIP	470K	5%	1/10W	
R241	1-216-113-00	RES, CHIP	470K	5%	1/10W	
R242	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R243	1-216-113-00	RES, CHIP	470K	5%	1/10W	
R244	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R245	1-216-022-00	RES, CHIP	75	5%	1/10W	
R246	1-216-113-00	RES, CHIP	470K	5%	1/10W	
R247	1-216-113-00	RES, CHIP	470K	5%	1/10W	
R248	1-216-113-00	RES, CHIP	470K	5%	1/10W	
R249	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	
R250	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	
R251	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	
R252	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R254	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R256	1-216-295-91	SHORT				
R257	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R258	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	
R259	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R260	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	
R261	1-216-025-91	RES, CHIP	100	5%	1/10W	
R262	1-216-067-00	RES, CHIP	5.6K	5%	1/10W	
R263	1-216-025-91	RES, CHIP	100	5%	1/10W	
R264	1-216-067-00	RES, CHIP	5.6K	5%	1/10W	
R265	1-216-025-91	RES, CHIP	100	5%	1/10W	
R266	1-216-025-91	RES, CHIP	100	5%	1/10W	
R267	1-216-025-91	RES, CHIP	100	5%	1/10W	
R268	1-216-067-00	RES, CHIP	5.6K	5%	1/10W	
R269	1-216-067-00	RES, CHIP	5.6K	5%	1/10W	
R270	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R271	1-216-067-00	RES, CHIP	5.6K	5%	1/10W	
R272	1-216-025-91	RES, CHIP	100	5%	1/10W	
R273	1-216-067-00	RES, CHIP	5.6K	5%	1/10W	
R274	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R275	1-216-025-91	RES, CHIP	100	5%	1/10W	
R276	1-216-295-91	SHORT				
R278	1-216-067-00	RES, CHIP	5.6K	5%	1/10W	
R279	1-216-025-91	RES, CHIP	100	5%	1/10W	
R280	1-216-067-00	RES, CHIP	5.6K	5%	1/10W	
R281	1-216-025-91	RES, CHIP	100	5%	1/10W	
R282	1-216-025-91	RES, CHIP	100	5%	1/10W	
R283	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R284	1-216-033-00	RES, CHIP	220	5%	1/10W	
R285	1-216-033-00	RES, CHIP	220	5%	1/10W	
R286	1-216-067-00	RES, CHIP	5.6K	5%	1/10W	
R287	1-216-025-91	RES, CHIP	100	5%	1/10W	
R288	1-216-067-00	RES, CHIP	5.6K	5%	1/10W	
R289	1-216-067-00	RES, CHIP	5.6K	5%	1/10W	
R290	1-216-025-91	RES, CHIP	100	5%	1/10W	
R291	1-216-067-00	RES, CHIP	5.6K	5%	1/10W	
R293	1-216-025-91	RES, CHIP	100	5%	1/10W	
R294	1-216-077-00	RES, CHIP	15K	5%	1/10W	
R295	1-216-025-91	RES, CHIP	100	5%	1/10W	
R296	1-216-025-91	RES, CHIP	100	5%	1/10W	
R297	1-216-025-91	RES, CHIP	100	5%	1/10W	
R300	1-216-025-91	RES, CHIP	100	5%	1/10W	
R301	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R302	1-216-295-91	SHORT				
R902	1-249-405-11	CARBON	100	5%	1/4W	F
R921	1-249-405-11	CARBON	100	5%	1/4W	F
R923	1-249-405-11	CARBON	100	5%	1/4W	F
R925	1-249-405-11	CARBON	100	5%	1/4W	F
R926	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R1051	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R1052	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R1054	1-216-025-91	RES, CHIP	100	5%	1/10W	
R1055	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R1056	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R1057	1-216-025-91	RES, CHIP	100	5%	1/10W	
R1058	1-216-025-91	RES, CHIP	100	5%	1/10W	
R1059	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	
R1060	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R1062	1-216-025-91	RES, CHIP	100	5%	1/10W	
R1063	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R1064	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R1065	1-216-025-91	RES, CHIP	100	5%	1/10W	
R1070	1-216-025-91	RES, CHIP	100	5%	1/10W	
R1201	1-216-025-91	RES, CHIP	100	5%	1/10W	
R1202	1-216-025-91	RES, CHIP	100	5%	1/10W	
R1204	1-216-295-91	SHORT				
R1206	1-216-295-91	SHORT				

UX COMPLETE PARTS LISTING

REF.NO.	PART NO.	DESCRIPTION			REMARK
R1208	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1209	1-216-295-91	SHORT			
R1210	1-216-295-91	SHORT			
R1212	1-216-295-91	SHORT			
R1213	1-216-295-91	SHORT			
R1214	1-216-295-91	SHORT			
R1215	1-208-774-11	RES, CHIP	470	0.50%	1/10W
R1216	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R1217	1-216-091-00	RES, CHIP	56K	5%	1/10W
R1219	1-216-073-00	RES, CHIP	10K	5%	1/10W
R1220	1-216-013-00	RES, CHIP	33	5%	1/10W
R1221	1-216-121-91	RES, CHIP	1M	5%	1/10W
R1222	1-216-073-00	RES, CHIP	10K	5%	1/10W
R1223	1-216-097-91	RES, CHIP	100K	5%	1/10W
R1224	1-216-089-91	RES, CHIP	47K	5%	1/10W
R1225	1-216-097-91	RES, CHIP	100K	5%	1/10W
R1227	1-216-073-00	RES, CHIP	10K	5%	1/10W
R1228	1-208-774-11	RES, CHIP	470	0.50%	1/10W
R1229	1-216-121-91	RES, CHIP	1M	5%	1/10W
R1230	1-216-073-00	RES, CHIP	10K	5%	1/10W
R1231	1-216-295-91	SHORT			
R1233	1-216-097-91	RES, CHIP	100K	5%	1/10W
R1234	1-216-091-00	RES, CHIP	56K	5%	1/10W
R1235	1-216-013-00	RES, CHIP	33	5%	1/10W
R1236	1-216-097-91	RES, CHIP	100K	5%	1/10W
R1237	1-216-089-91	RES, CHIP	47K	5%	1/10W
R1238	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R1240	1-216-295-91	SHORT			
R1242	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R1243	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R1244	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1245	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1246	1-216-022-00	RES, CHIP	75	5%	1/10W
R1247	1-216-113-00	RES, CHIP	470K	5%	1/10W
R1248	1-216-113-00	RES, CHIP	470K	5%	1/10W
R1249	1-216-113-00	RES, CHIP	470K	5%	1/10W
R1250	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R1251	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1252	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R1254	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1255	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R1256	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R1257	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R1258	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1259	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1260	1-216-295-91	SHORT			
R1263	1-216-295-91	SHORT			
R1264	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1265	1-216-001-00	RES, CHIP	10	5%	1/10W
R1266	1-216-041-00	RES, CHIP	470	5%	1/10W
R1267	1-216-025-91	RES, CHIP	100	5%	1/10W
R1268	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1269	1-216-041-00	RES, CHIP	470	5%	1/10W
R1270	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1271	1-216-001-00	RES, CHIP	10	5%	1/10W

REF.NO.	PART NO.	DESCRIPTION			REMARK
R1272	1-216-655-11	RES, CHIP	1.5K	0.50%	1/10W
R1273	1-208-788-11	RES, CHIP	1.8K	0.50%	1/10W
R1274	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1276	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1277	1-216-025-91	RES, CHIP	100	5%	1/10W
R1278	1-216-025-91	RES, CHIP	100	5%	1/10W
R1279	1-216-025-91	RES, CHIP	100	5%	1/10W
R1280	1-216-025-91	RES, CHIP	100	5%	1/10W
R1287	1-216-295-91	SHORT			
R1288	1-216-295-91	SHORT			
R1289	1-216-295-91	SHORT			
R1290	1-216-295-91	SHORT			
R1291	1-216-295-91	SHORT			
R1292	1-216-295-91	SHORT			
R1293	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1294	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1295	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1296	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1297	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1298	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1299	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1300	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1304	1-216-041-00	RES, CHIP	470	5%	1/10W
R1305	1-208-776-11	RES, CHIP	560	0.50%	1/10W
R1306	1-216-025-91	RES, CHIP	100	5%	1/10W
R1307	1-216-041-00	RES, CHIP	470	5%	1/10W
R1308	1-208-776-11	RES, CHIP	560	0.50%	1/10W
R1309	1-216-025-91	RES, CHIP	100	5%	1/10W
R1422	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R1423	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R2001	1-216-073-00	RES, CHIP	10K	5%	1/10W
R2002	1-216-073-00	RES, CHIP	10K	5%	1/10W
R2003	1-216-085-00	RES, CHIP	33K	5%	1/10W
R2004	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R2005	1-216-295-91	SHORT			
R2006	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R2008	1-216-025-91	RES, CHIP	100	5%	1/10W
R2009	1-216-025-91	RES, CHIP	100	5%	1/10W
R2010	1-216-001-00	RES, CHIP	10	5%	1/10W
R2011	1-216-041-00	RES, CHIP	470	5%	1/10W
R2012	1-216-025-91	RES, CHIP	100	5%	1/10W
R2013	1-216-081-00	RES, CHIP	22K	5%	1/10W
R2014	1-216-069-00	RES, CHIP	6.8K	5%	1/10W
R2015	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R2016	1-208-822-11	RES, CHIP	47K	0.50%	1/10W
R2021	1-216-081-00	RES, CHIP	22K	5%	1/10W
R2022	1-216-049-91	RES, CHIP	1K	5%	1/10W
R2023	1-216-049-91	RES, CHIP	1K	5%	1/10W
R2027	1-216-049-91	RES, CHIP	1K	5%	1/10W
R2028	1-216-049-91	RES, CHIP	1K	5%	1/10W
R2029	1-216-043-91	RES, CHIP	560	5%	1/10W
R2030	1-216-043-91	RES, CHIP	560	5%	1/10W
R2031	1-216-067-00	RES, CHIP	5.6K	5%	1/10W
R2032	1-216-067-00	RES, CHIP	5.6K	5%	1/10W
R2033	1-216-057-00	RES, CHIP	2.2K	5%	1/10W

REF.NO.	PART NO.	DESCRIPTION			REMARK
R2034	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R2035	1-208-775-11	RES, CHIP	510	0.50%	1/10W
R2036	1-208-775-11	RES, CHIP	510	0.50%	1/10W
R2037	1-216-051-00	RES, CHIP	1.2K	5%	1/10W
R2038	1-216-033-00	RES, CHIP	220	5%	1/10W
R2039	1-216-047-91	RES, CHIP	820	5%	1/10W
R2040	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R2041	1-216-047-91	RES, CHIP	820	5%	1/10W
R2042	1-216-075-00	RES, CHIP	12K	5%	1/10W
R2043	1-216-085-00	RES, CHIP	33K	5%	1/10W
R2044	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R2046	1-216-075-00	RES, CHIP	12K	5%	1/10W
R2047	1-216-085-00	RES, CHIP	33K	5%	1/10W
R2048	1-216-049-91	RES, CHIP	1K	5%	1/10W
R2049	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R2050	1-216-017-91	RES, CHIP	47	5%	1/10W
R2051	1-216-049-91	RES, CHIP	1K	5%	1/10W
R2052	1-216-049-91	RES, CHIP	1K	5%	1/10W
R2053	1-216-041-00	RES, CHIP	470	5%	1/10W
R2054	1-216-041-00	RES, CHIP	470	5%	1/10W
R2055	1-216-017-91	RES, CHIP	47	5%	1/10W
R2056	1-216-067-00	RES, CHIP	5.6K	5%	1/10W
R2057	1-216-049-91	RES, CHIP	1K	5%	1/10W
R2058	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R2059	1-216-049-91	RES, CHIP	1K	5%	1/10W
R2060	1-216-025-91	RES, CHIP	100	5%	1/10W
R2061	1-216-043-91	RES, CHIP	560	5%	1/10W
R2062	1-216-105-91	RES, CHIP	220K	5%	1/10W
R2063	1-216-089-91	RES, CHIP	47K	5%	1/10W
R2064	1-216-049-91	RES, CHIP	1K	5%	1/10W
R2065	1-216-049-91	RES, CHIP	1K	5%	1/10W
R2066	1-216-033-00	RES, CHIP	220	5%	1/10W
R2067	1-216-048-00	RES, CHIP	910	5%	1/10W
R2069	1-208-776-11	RES, CHIP	560	0.50%	1/10W
R2070	1-208-777-11	RES, CHIP	620	0.50%	1/10W
R2071	1-216-067-00	RES, CHIP	5.6K	5%	1/10W
R2072	1-216-043-91	RES, CHIP	560	5%	1/10W
R2073	1-216-049-91	RES, CHIP	1K	5%	1/10W
R2074	1-216-025-91	RES, CHIP	100	5%	1/10W
R2076	1-216-025-91	RES, CHIP	100	5%	1/10W
R2077	1-216-025-91	RES, CHIP	100	5%	1/10W
R2079	1-216-295-91	SHORT			
R2092	1-216-025-91	RES, CHIP	100	5%	1/10W
R2093	1-216-025-91	RES, CHIP	100	5%	1/10W
R2094	1-208-810-11	RES, CHIP	15K	0.50%	1/10W
R2095	1-216-025-91	RES, CHIP	100	5%	1/10W
R2096	1-216-025-91	RES, CHIP	100	5%	1/10W
R2097	1-216-025-91	RES, CHIP	100	5%	1/10W
R2098	1-216-025-91	RES, CHIP	100	5%	1/10W
R2099	1-216-025-91	RES, CHIP	100	5%	1/10W
R2100	1-216-025-91	RES, CHIP	100	5%	1/10W
R2101	1-216-025-91	RES, CHIP	100	5%	1/10W
R2102	1-216-025-91	RES, CHIP	100	5%	1/10W
R2103	1-216-017-91	RES, CHIP	47	5%	1/10W
R2104	1-216-295-91	SHORT			
R2105	1-216-295-91	SHORT			
R2106	1-216-295-91	SHORT			
R2107	1-216-295-91	SHORT			
R2113	1-216-017-91	RES, CHIP	47	5%	1/10W
R2115	1-216-049-91	RES, CHIP	1K	5%	1/10W
R2153	1-216-295-91	SHORT			
R2157	1-216-295-91	SHORT			
R2183	1-216-295-91	SHORT			
R2188	1-216-295-91	SHORT			
R2201	1-216-022-00	RES, CHIP	75	5%	1/10W
R2202	1-216-022-00	RES, CHIP	75	5%	1/10W
R2203	1-216-022-00	RES, CHIP	75	5%	1/10W

CRYSTAL

X2001	1-767-606-11	VIBRATOR, CRYSTAL
X2002	1-767-367-21	VIBRATOR, CERAMIC

UX

PIP SCHEMATIC (FOR UX BOARD MAIN COMPONENTS SEE PAGE 106)

- *** A-1394-947-A UX BOARD, COMPLETE (KV-32XBR250/36XBR250 only)**
- *** A-1394-948-A UX BOARD, COMPLETE (KV-34FX250C/38FX250/38FX250C/38FX250T only)**

CAPACITOR

REF.NO.	PART NO.	DESCRIPTION			REMARK
C3301	1-104-664-11	ELECT	47µF	20%	25V
C3302	1-163-021-91	CERAMIC	0.01µF	10%	50V
C3319	1-163-031-11	CERAMIC	0.01µF		50V
C3320	1-126-960-11	ELECT	1µF	20%	50V
C3321	1-163-231-11	CERAMIC	15pF	5%	50V
C3322	1-163-231-11	CERAMIC	15pF	5%	50V
C3323	1-163-031-11	CERAMIC	0.01µF		50V
C3324	1-126-926-11	ELECT	1000µF	20%	10V
C3325	1-126-926-11	ELECT	1000µF	20%	10V
C3328	1-126-925-11	ELECT	470µF	20%	10V
C3329	1-104-664-11	ELECT	47µF	20%	16V
C3330	1-163-031-11	CERAMIC	0.01µF		50V
C3331	1-104-664-11	ELECT	47µF	20%	16V
C3332	1-104-664-11	ELECT	47µF	20%	25V
C3334	1-163-031-11	CERAMIC	0.01µF		50V
C3340	1-163-031-11	CERAMIC	0.01µF		50V
C3342	1-163-009-11	CERAMIC	0.001µF	10%	50V
C3346	1-163-251-11	CERAMIC	100pF	5%	50V
C3347	1-126-960-11	ELECT	1µF	20%	50V
C3348	1-104-664-11	ELECT	47µF	20%	16V
C3349	1-163-249-11	CERAMIC	82pF	5%	50V
C3350	1-164-004-11	CERAMIC	0.1µF	10%	25V
C3352	1-163-031-11	CERAMIC	0.01µF		50V
C3353	1-126-960-11	ELECT	1µF	20%	50V
C3354	1-163-031-11	CERAMIC	0.01µF		50V
C3355	1-104-664-11	ELECT	47µF	20%	16V
C3356	1-163-038-91	CERAMIC	0.1µF		25V
C3357	1-163-038-91	CERAMIC	0.1µF		25V
C3358	1-163-038-91	CERAMIC	0.1µF		25V
C3359	1-163-038-91	CERAMIC	0.1µF		25V
C3360	1-163-038-91	CERAMIC	0.1µF		25V
C3361	1-163-038-91	CERAMIC	0.1µF		25V
C3362	1-104-664-11	ELECT	47µF	20%	16V
C3363	1-163-031-11	CERAMIC	0.01µF		50V
C3364	1-163-229-11	CERAMIC	12pF	5%	50V
C3365	1-163-133-00	CERAMIC	470pF	5%	50V
C3366	1-126-959-11	ELECT	0.47µF	20%	50V
C3367	1-126-963-11	ELECT	4.7µF	20%	50V
C3368	1-164-005-11	CERAMIC	0.47µF		25V
C3369	1-163-251-11	CERAMIC	100pF	5%	50V
C3370	1-126-960-11	ELECT	1µF	20%	50V
C3371	1-163-017-00	CERAMIC	0.0047µF	10%	50V
C3372	1-164-005-11	CERAMIC	0.47µF		25V
C3377	1-164-004-11	CERAMIC	0.1µF	10%	25V
	(KV-32XBR250/36XBR250 only)				
C3378	1-163-006-11	CERAMIC	560pF	10%	50V
	(KV-32XBR250/36XBR250 only)				
C3380	1-164-004-11	CERAMIC	0.1µF	10%	25V
	(KV-32XBR250/36XBR250 only)				
C3381	1-163-019-00	CERAMIC	0.0068µF	10%	50V
	(KV-32XBR250/36XBR250 only)				
C3382	1-164-344-11	CERAMIC	0.068µF	10%	25V
	(KV-32XBR250/36XBR250 only)				
C3383	1-126-956-91	ELECT	0.1µF	20%	50V
	(KV-32XBR250/36XBR250 only)				
C3385	1-126-941-11	ELECT	470µF	20%	25V

FERRITE BEAD

REF.NO.	PART NO.	DESCRIPTION
FB3301	1-414-234-22	INDUCTOR
FB3302	1-414-234-22	INDUCTOR

IC

REF.NO.	PART NO.	DESCRIPTION
IC3302	8-759-358-38	IC NJM78M05DLA(TE1)
IC3303	8-759-533-89	IC SDA9288XE-GEG-B121
IC3304	8-752-086-80	IC CXA2019AQ-T4
IC3307	8-759-575-50	IC Z8613012SSC
	(KV-32XBR250/36XBR250 only)	
IC3308	8-759-932-69	IC BU4053BCF-T2

COIL

REF.NO.	PART NO.	DESCRIPTION	
L3301	1-414-856-11	INDUCTOR	10µH
L3302	1-410-473-11	INDUCTOR	18µH
L3303	1-410-473-11	INDUCTOR	18µH
L3305	1-408-619-31	INDUCTOR	220µH
L3306	1-414-857-11	INDUCTOR	100µH
L3307	1-414-856-11	INDUCTOR	10µH

TRANSISTOR

REF.NO.	PART NO.	DESCRIPTION
Q3301	8-729-422-27	TRANSISTOR 2SD601A-Q
Q3302	8-729-216-22	TRANSISTOR 2SA1162-G
Q3305	8-729-216-22	TRANSISTOR 2SA1162-G
Q3306	8-729-216-22	TRANSISTOR 2SA1162-G
Q3307	8-729-216-22	TRANSISTOR 2SA1162-G
Q3310	8-729-422-27	TRANSISTOR 2SD601A-Q
Q3312	8-729-216-22	TRANSISTOR 2SA1162-G
Q3314	8-729-216-22	TRANSISTOR 2SA1162-G
Q3322	8-729-422-27	TRANSISTOR 2SD601A-Q
	(KV-32XBR250/36XBR250 only)	
R3301	1-216-295-91	SHORT
R3303	1-216-295-91	SHORT
R3304	1-216-295-91	SHORT

REF.NO.	PART NO.	DESCRIPTION			REMARK
R3305	1-216-043-91	RES, CHIP	560	5%	1/10W
R3306	1-216-295-91	SHORT			
R3308	1-216-295-91	SHORT			
	(KV-32XBR250/36XBR250 only)				
R3309	1-216-041-00	RES, CHIP	470	5%	1/10W
R3312	1-216-037-00	RES, CHIP	330	5%	1/10W
R3313	1-216-295-91	SHORT			
R3314	1-216-049-91	RES, CHIP	1K	5%	1/10W
R3320	1-216-295-91	SHORT			
R3322	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R3323	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R3324	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R3325	1-216-025-91	RES, CHIP	100	5%	1/10W
	(KV-32XBR250/36XBR250 only)				
R3326	1-216-295-91	SHORT			
R3329	1-216-069-00	RES, CHIP	6.8K	5%	1/10W
R3332	1-216-033-00	RES, CHIP	220	5%	1/10W
R3337	1-216-033-00	RES, CHIP	220	5%	1/10W
R3338	1-216-033-00	RES, CHIP	220	5%	1/10W
R3339	1-216-049-91	RES, CHIP	1K	5%	1/10W
R3340	1-216-041-00	RES, CHIP	470	5%	1/10W
R3341	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R3342	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R3343	1-216-049-91	RES, CHIP	1K	5%	1/10W
R3346	1-216-049-91	RES, CHIP	1K	5%	1/10W
R3350	1-216-295-91	SHORT			
R3351	1-216-295-91	SHORT			
R3352	1-216-049-91	RES, CHIP	1K	5%	1/10W
R3355	1-216-295-91	SHORT			
R3357	1-216-295-91	SHORT			
R3358	1-216-047-91	RES, CHIP	820	5%	1/10W
R3359	1-216-047-91	RES, CHIP	820	5%	1/10W
R3360	1-216-053-00	RES, CHIP	1.5K	5%	1/10W
R3361	1-216-045-00	RES, CHIP	680	5%	1/10W
R3362	1-208-768-11	RES, CHIP	240	0.50%	1/10W
R3363	1-208-766-11	RES, CHIP	220	0.50%	1/10W
R3364	1-208-769-11	RES, CHIP	300	0.50%	1/10W
R3370	1-216-295-91	SHORT			
R3375	1-216-041-00	RES, CHIP	470	5%	1/10W
R3376	1-216-071-00	RES, CHIP	8.2K	5%	1/10W
R3377	1-216-073-00	RES, CHIP	10K	5%	1/10W
R3378	1-216-053-00	RES, CHIP	1.5K	5%	1/10W
R3379	1-216-077-00	RES, CHIP	15K	5%	1/10W
R3380	1-216-295-91	SHORT			
R3381	1-216-295-91	SHORT			
R3382	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R3383	1-216-025-91	RES, CHIP	100	5%	1/10W
R3384	1-216-033-00	RES, CHIP	220	5%	1/10W
R3385	1-216-109-00	RES, CHIP	330K	5%	1/10W
R3387	1-216-295-91	SHORT			
R3388	1-216-295-91	SHORT			
R3392	1-216-295-91	SHORT			
	(KV-32XBR250/36XBR250 only)				
R3393	1-216-025-91	RES, CHIP	100	5%	1/10W
	(KV-32XBR250/36XBR250 only)				

REF.NO.	PART NO.	DESCRIPTION			REMARK
R3394	1-216-041-00	RES, CHIP	470	5%	1/10W
	(KV-32XBR250/36XBR250 only)				
R3395	1-216-061-00	RES, CHIP	3.3K	5%	1/10W
R3398	1-216-069-00	RES, CHIP	6.8K	5%	1/10W
	(KV-32XBR250/36XBR250 only)				
R3399	1-216-025-91	RES, CHIP	100	5%	1/10W
	(KV-32XBR250/36XBR250 only)				
R3401	1-216-025-91	RES, CHIP	100	5%	1/10W
	(KV-32XBR250/36XBR250 only)				
R3402	1-216-025-91	RES, CHIP	100	5%	1/10W
	(KV-32XBR250/36XBR250 only)				
R3404	1-216-073-00	RES, CHIP	10K	5%	1/10W
	(KV-32XBR250/36XBR250 only)				

CRYSTAL

X3302	1-760-095-21	VIBRATOR, CRYSTAL
X3303	1-577-611-11	OSCILLATOR, CERAMIC
X3304	1-567-505-11	OSCILLATOR, CRYSTAL

UY COMPLETE PARTS LISTING

UY

MAIN SCHEMATIC (FOR UY PIP COMPONENTS SEE PAGE 119)

- * **A-1394-938-A UY BOARD, COMPLETE (KV-32FS10/34FV10/36FS10 only)**
- * **A-1394-943-A UY BOARD, COMPLETE (KV-32FV15/36FV15 only)**
- * **A-1394-944-A UY BOARD, COMPLETE (KV-34FV15/34FV15C/34FV15K/34FV15T/38FV15K only)**

CAPACITOR

REF.NO.	PART NO.	DESCRIPTION			REMARK
C201	1-128-551-11	ELECT	22µF	20%	25V
C202	1-128-551-11	ELECT	22µF	20%	25V
C203	1-128-551-11	ELECT	22µF	20%	25V
C204	1-126-960-11	ELECT	1µF	20%	50V
C205	1-126-960-11	ELECT	1µF	20%	50V
C231	1-163-021-91	CERAMIC	0.01µF	10%	50V
C232	1-126-933-11	ELECT	100µF	20%	16V
C233	1-126-933-11	ELECT	100µF	20%	16V
C234	1-126-960-11	ELECT	1µF	20%	50V
C235	1-126-960-11	ELECT	1µF	20%	50V
C236	1-126-933-11	ELECT	100µF	20%	16V
C237	1-126-9600-11	ELECT	1µF	20%	50V
C238	1-126-960-11	ELECT	1µF	20%	50V
C241	1-126-941-11	ELECT	470µF	20%	25V
C242	1-126-959-11	ELECT	0.47µF	20%	50V
C243	1-126-959-11	ELECT	0.47µF	20%	50V
C244	1-126-959-11	ELECT	0.47µF	20%	50V
C245	1-126-959-11	ELECT	0.47µF	20%	50V
C264	1-164-004-11	CERAMIC	0.1µF	10%	25V
C268	1-163-021-91	CERAMIC	0.01µF	10%	50V
C269	1-163-021-91	CERAMIC	0.01µF	10%	50V
C272	1-163-231-11	CERAMIC	15pF	5%	50V
C273	1-128-551-11	ELECT	22µF	20%	25V
C277	1-128-551-11	ELECT	22µF	20%	25V
C278	1-128-551-11	ELECT	22µF	20%	25V
(KV-32FV15/36FV15/34FV15/34FV15C/34FV15K/34FV15T/38FV15K only)					
C279	1-163-021-91	CERAMIC	0.01µF	10%	50V
C281	1-126-933-11	ELECT	100µF	20%	16V
C284	1-126-941-11	ELECT	470µF	20%	25V
C286	1-164-161-11	CERAMIC	0.0022µF	10%	50V
C287	1-164-161-11	CERAMIC	0.0022µF	10%	50V
C1051	1-126-964-11	ELECT	10µF	20%	50V
C1053	1-104-665-11	ELECT	100µF	20%	25V
C1201	1-163-809-11	CERAMIC	0.047µF	10%	25V
C1202	1-163-021-91	CERAMIC	0.01µF	10%	50V
C1203	1-126-960-11	ELECT	1µF	20%	50V
C1204	1-163-809-11	CERAMIC	0.047µF	10%	25V
C1209	1-163-259-91	CERAMIC	220pF	5%	50V
C1210	1-163-259-91	CERAMIC	220pF	5%	50V
C1211	1-126-933-11	ELECT	100µF	20%	16V
C1212	1-126-933-11	ELECT	100µF	20%	16V
C1213	1-126-941-11	ELECT	470µF	20%	25V
C1214	1-163-021-91	CERAMIC	0.01µF	10%	50V
C1215	1-126-960-11	ELECT	1µF	20%	50V
C2000	1-126-941-11	ELECT	470µF	20%	25V
C2002	1-126-933-11	ELECT	100µF	20%	16V
C2007	1-104-665-11	ELECT	100µF	20%	10V
C2008	1-163-038-91	CERAMIC	0.1µF		25V
C2012	1-163-021-91	CERAMIC	0.01µF	10%	50V
C2015	1-163-021-91	CERAMIC	0.01µF	10%	50V
C2045	1-163-237-11	CERAMIC	27pF	5%	50V
C2047	1-126-961-11	ELECT	2.2µF	20%	50V
C2048	1-126-964-11	ELECT	10µF	20%	50V
C2049	1-104-664-11	ELECT	47µF	20%	16V
C2056	1-163-231-11	CERAMIC	15pF	5%	50V
C2060	1-163-031-11	CERAMIC	0.01µF		50V
C2062	1-104-664-11	ELECT	47µF	20%	16V
C2096	1-163-231-11	CERAMIC	15pF	5%	50V
C2097	1-163-231-11	CERAMIC	15pF	5%	50V
C2201	1-126-965-11	ELECT	22µF	20%	50V
C2202	1-126-933-11	ELECT	100µF	20%	16V
C2203	1-163-021-91	CERAMIC	0.01µF	10%	50V
C3556	1-163-038-91	CERAMIC	0.1µF		25V
C3557	1-163-021-91	CERAMIC	0.01µF	10%	50V
C3558	1-126-964-11	ELECT	10µF	20%	50V
C3559	1-163-038-91	CERAMIC	0.1µF		25V
C3560	1-163-038-91	CERAMIC	0.1µF		25V
C3561	1-126-964-11	ELECT	10µF	20%	50V
C3562	1-163-038-91	CERAMIC	0.1µF		25V
C3563	1-163-038-91	CERAMIC	0.1µF		25V
C3564	1-163-038-91	CERAMIC	0.1µF		25V
C3565	1-163-038-91	CERAMIC	0.1µF		25V
C3566	1-126-964-11	ELECT	10µF	20%	50V
C3567	1-163-021-91	CERAMIC	0.01µF	10%	50V
C3568	1-163-021-91	CERAMIC	0.01µF	10%	50V
C3569	1-126-964-11	ELECT	10µF	20%	50V
C3570	1-126-964-11	ELECT	10µF	20%	50V
C3571	1-163-021-91	CERAMIC	0.01µF	10%	50V
C3573	1-163-037-11	CERAMIC	0.022µF	10%	50V
C3574	1-163-021-91	CERAMIC	0.01µF	10%	50V
C3575	1-126-964-11	ELECT	10µF	20%	50V
C3576	1-163-021-91	CERAMIC	0.01µF	10%	50V
C3577	1-126-964-11	ELECT	10µF	20%	50V
C3578	1-163-021-91	CERAMIC	0.01µF	10%	50V
C3579	1-104-664-11	ELECT	47µF	20%	16V

CONNECTOR

REF.NO.	PART NO.	DESCRIPTION	REMARK
CN261	1-564-510-11	PLUG, CONNECTOR	7P
(KV-32FV15/36FV15/34FV15/34FV15C/34FV15K/34FV15T/38FV15K only)			
CN262	1-691-632-21	CONNECTOR, BOARD TO BOARD	
CN263	1-691-632-21	CONNECTOR, BOARD TO BOARD	15P
(KV-32FV15/36FV15/34FV15/34FV15C/34FV15K/34FV15T/38FV15K only)			
CN264	1-691-632-21	CONNECTOR, BOARD TO BOARD	
CN265	1-564-513-11	PLUG, CONNECTOR	10P

DIODE

REF.NO.	PART NO.	DESCRIPTION	REMARK
D201	8-719-032-47	DIODE MTZJ-T-9110	
D202	8-719-032-47	DIODE MTZJ-T-9110	
D203	8-719-032-47	DIODE MTZJ-T-9110	
D204	8-719-032-47	DIODE MTZJ-T-9110	
D205	8-719-032-47	DIODE MTZJ-T-9110	
D231	8-719-032-47	DIODE MTZJ-T-9110	
D232	8-719-032-47	DIODE MTZJ-T-9110	
D233	8-719-032-47	DIODE MTZJ-T-9110	
D234	8-719-032-47	DIODE MTZJ-T-9110	
D235	8-719-032-47	DIODE MTZJ-T-9110	
D236	8-719-032-47	DIODE MTZJ-T-9110	
D237	8-719-032-47	DIODE MTZJ-T-9110	
D238	8-719-032-47	DIODE MTZJ-T-9110	
D239	8-719-032-47	DIODE MTZJ-T-9110	
D245	8-719-157-94	DIODE RD3.3SB	
D246	8-719-157-94	DIODE RD3.3SB	
D247	8-719-157-94	DIODE RD3.3SB	
D248	8-719-157-94	DIODE RD3.3SB	
D250	8-719-157-94	DIODE RD3.3SB	
D261	8-719-032-47	DIODE MTZJ-T-9110	

REF.NO.	PART NO.	DESCRIPTION	REMARK
D902	8-719-032-47	DIODE MTZJ-T-9110	
D910	8-719-032-47	DIODE MTZJ-T-9110	
D911	8-719-032-47	DIODE MTZJ-T-9110	
D912	8-719-032-47	DIODE MTZJ-T-9110	

(KV-32FV15/36FV15/34FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

REF.NO.	PART NO.	DESCRIPTION	REMARK
D1051	8-719-073-01	DIODE MA111-TX	
D1052	8-719-073-01	DIODE MA111-TX	
D2201	8-719-032-47	DIODE MTZJ-T-9110	
D2202	8-719-032-47	DIODE MTZJ-T-9110	
D2203	8-719-032-47	DIODE MTZJ-T-9110	

FILTER

REF.NO.	PART NO.	DESCRIPTION	REMARK
FL2001	1-239-847-11	FILTER, LOW PASS	
FL2002	1-239-847-11	FILTER, LOW PASS	
FL2004	1-239-847-11	FILTER, LOW PASS	

IC

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC261	8-752-066-69	IC CXA1845Q	
IC1051	8-752-058-68	IC CXA1315M	
IC2006	8-759-358-38	IC NJM78M05DLA(TE1)	
IC3504	8-752-390-37	IC CXD2064Q-T6	

JACK

REF.NO.	PART NO.	DESCRIPTION	REMARK
J231	1-750-515-11	TERMINAL BLOCK, S 3P	
J232	1-750-517-11	JACK BLOCK, PIN 3P	
J233	1-750-516-11	JACK BLOCK, PIN 2P	
J234	1-750-517-11	JACK BLOCK, PIN 3P	
J236	1-774-358-11	JACK BLOCK, PIN	

REF.NO.	PART NO.	DESCRIPTION	REMARK
J902	1-764-143-11	JACK	3P
J903	1-764-143-11	JACK	3P
J904	1-764-143-11	JACK	3P
J905	1-764-143-11	JACK	3P

(KV-32FV15/36FV15/34FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

CHIP CONDUCTOR

REF.NO.	PART NO.	DESCRIPTION	REMARK
JR1001	1-216-295-91	SHORT	
JR1002	1-216-295-91	SHORT	
JR1003	1-216-295-91	SHORT	
JR1004	1-216-295-91	SHORT	
JR1009	1-216-295-91	SHORT	

(KV-32FS10/34FV10/36FS10 only)

REF.NO.	PART NO.	DESCRIPTION	REMARK
JR1014	1-216-295-91	SHORT	
JR1015	1-216-295-91	SHORT	
JR1016	1-216-295-91	SHORT	
JR1017	1-216-295-91	SHORT	
JR1018	1-216-295-91	SHORT	
JR1019	1-216-295-91	SHORT	
JR1020	1-216-295-91	SHORT	
JR1021	1-216-295-91	SHORT	
JR1022	1-216-295-91	SHORT	
JR1023	1-216-295-91	SHORT	

COIL

REF.NO.	PART NO.	DESCRIPTION	REMARK
L261	1-414-857-11	INDUCTOR	100μH
L1201	1-408-397-00	INDUCTOR	1μH
L1202	1-408-397-00	INDUCTOR	1μH
L2004	1-414-856-11	INDUCTOR	10μH
L2005	1-410-494-11	INDUCTOR	1mH
L2009	1-414-856-11	INDUCTOR	10μH
L3581	1-408-397-00	INDUCTOR	1μH
L3582	1-408-397-00	INDUCTOR	1μH

TRANSISTOR

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q202	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q203	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q205	8-729-216-22	TRANSISTOR 2SA1162-G	
Q206	8-729-216-22	TRANSISTOR 2SA1162-G	
Q208	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q209	8-729-422-27	TRANSISTOR 2SD601A-Q	

(KV-32FV15/36FV15/34FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q210	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q211	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q212	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q231	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q233	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q234	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q235	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q236	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q237	8-729-216-22	TRANSISTOR 2SA1162-G	

UY COMPLETE PARTS LISTING

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q238	8-729-216-22	TRANSISTOR 2SA1162-G	
Q239	8-729-216-22	TRANSISTOR 2SA1162-G	
Q246	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q262	8-729-216-22	TRANSISTOR 2SA1162-G	

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q263	8-729-216-22	TRANSISTOR 2SA1162-G	
Q264	8-729-216-22	TRANSISTOR 2SA1162-G	
Q265	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q267	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1051	8-729-216-22	TRANSISTOR 2SA1162-G	

(KV-32FS10/34FV10/36FS10/34FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q1201	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1202	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1203	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1204	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1205	8-729-422-27	TRANSISTOR 2SD601A-Q	

(KV-32FS10/34FV10/36FS10/34FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q1206	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1207	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1208	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2003	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2004	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2005	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q2006	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q2007	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q2008	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q2009	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q2010	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q2014	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q2018	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2019	8-729-422-27	TRANSISTOR 2SD601A-Q	

RESISTOR

REF.NO.	PART NO.	DESCRIPTION			REMARK
R201	1-216-022-00	RES, CHIP	75	5%	1/10W
R202	1-216-022-00	RES, CHIP	75	5%	1/10W
R203	1-216-022-00	RES, CHIP	75	5%	1/10W
R204	1-216-113-00	RES, CHIP	470K	5%	1/10W
R205	1-216-113-00	RES, CHIP	470K	5%	1/10W
R206	1-216-295-91	SHORT			
R207	1-216-295-91	SHORT			
R208	1-216-295-91	SHORT			

REF.NO.	PART NO.	DESCRIPTION			REMARK
R209	1-216-089-91	RES, CHIP	47K	5%	1/10W
R210	1-216-081-00	RES, CHIP	22K	5%	1/10W
R211	1-216-089-91	RES, CHIP	47K	5%	1/10W
R212	1-216-081-00	RES, CHIP	22K	5%	1/10W
R213	1-216-089-91	RES, CHIP	47K	5%	1/10W

(KV-32FV15/36FV1534FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

REF.NO.	PART NO.	DESCRIPTION			REMARK
R214	1-216-081-00	RES, CHIP	22K	5%	1/10W
R218	1-208-774-11	RES, CHIP	470	0.50%	1/10W
R219	1-216-049-91	RES, CHIP	1K	5%	1/10W
R220	1-208-776-11	RES, CHIP	560	0.50%	1/10W
R221	1-208-774-11	RES, CHIP	470	0.50%	1/10W

(KV-32FV15/36FV1534FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

REF.NO.	PART NO.	DESCRIPTION			REMARK
R222	1-216-049-91	RES, CHIP	1K	5%	1/10W
R223	1-208-776-11	RES, CHIP	560	0.50%	1/10W
R225	1-216-025-91	RES, CHIP	100	5%	1/10W
R226	1-216-025-91	RES, CHIP	100	5%	1/10W
R228	1-216-049-91	RES, CHIP	1K	5%	1/10W
R229	1-216-049-91	RES, CHIP	1K	5%	1/10W

(KV-32FV15/36FV1534FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

REF.NO.	PART NO.	DESCRIPTION			REMARK
R230	1-216-089-91	RES, CHIP	47K	5%	1/10W
R231	1-216-022-00	RES, CHIP	75	5%	1/10W
R232	1-216-022-00	RES, CHIP	75	5%	1/10W
R233	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R234	1-216-022-00	RES, CHIP	75	5%	1/10W
R235	1-216-113-00	RES, CHIP	470K	5%	1/10W
R236	1-216-113-00	RES, CHIP	470K	5%	1/10W
R237	1-216-022-00	RES, CHIP	75	5%	1/10W
R238	1-216-113-00	RES, CHIP	470K	5%	1/10W
R239	1-216-113-00	RES, CHIP	470K	5%	1/10W
R241	1-216-113-00	RES, CHIP	470K	5%	1/10W
R242	1-216-049-91	RES, CHIP	1K	5%	1/10W
R243	1-216-113-00	RES, CHIP	470K	5%	1/10W
R244	1-216-049-91	RES, CHIP	1K	5%	1/10W
R245	1-216-022-00	RES, CHIP	75	5%	1/10W
R246	1-216-113-00	RES, CHIP	470K	5%	1/10W
R247	1-216-113-00	RES, CHIP	470K	5%	1/10W
R248	1-216-113-00	RES, CHIP	470K	5%	1/10W
R249	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R250	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R251	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R252	1-216-049-91	RES, CHIP	1K	5%	1/10W
R254	1-216-049-91	RES, CHIP	1K	5%	1/10W
R256	1-216-295-91	SHORT			
R257	1-216-049-91	RES, CHIP	1K	5%	1/10W
R258	1-216-025-91	RES, CHIP	100	5%	1/10W
R259	1-216-049-91	RES, CHIP	1K	5%	1/10W
R260	1-216-025-91	RES, CHIP	100	5%	1/10W
R261	1-216-025-91	RES, CHIP	100	5%	1/10W
R262	1-216-067-00	RES, CHIP	5.6K	5%	1/10W
R263	1-216-025-91	RES, CHIP	100	5%	1/10W
R264	1-216-067-00	RES, CHIP	5.6K	5%	1/10W
R265	1-216-025-91	RES, CHIP	100	5%	1/10W
R266	1-216-025-91	RES, CHIP	100	5%	1/10W
R267	1-216-025-91	RES, CHIP	100	5%	1/10W
R268	1-216-067-00	RES, CHIP	5.6K	5%	1/10W
R269	1-216-067-00	RES, CHIP	5.6K	5%	1/10W
R270	1-216-049-91	RES, CHIP	1K	5%	1/10W
R271	1-216-067-00	RES, CHIP	5.6K	5%	1/10W
R272	1-216-025-91	RES, CHIP	100	5%	1/10W
R273	1-216-067-00	RES, CHIP	5.6K	5%	1/10W
R274	1-216-049-91	RES, CHIP	1K	5%	1/10W
R275	1-216-025-91	RES, CHIP	100	5%	1/10W
R276	1-216-295-91	SHORT			
R278	1-216-067-00	RES, CHIP	5.6K	5%	1/10W
R279	1-216-025-91	RES, CHIP	100	5%	1/10W
R280	1-216-067-00	RES, CHIP	5.6K	5%	1/10W

REF.NO.	PART NO.	DESCRIPTION			REMARK
R281	1-216-025-91	RES, CHIP	100	5%	1/10W
R282	1-216-025-91	RES, CHIP	100	5%	1/10W
R283	1-216-049-91	RES, CHIP	1K	5%	1/10W
R284	1-216-033-00	RES, CHIP	220	5%	1/10W
R285	1-216-033-00	RES, CHIP	220	5%	1/10W
R286	1-216-067-00	RES, CHIP	5.6K	5%	1/10W
R287	1-216-025-91	RES, CHIP	100	5%	1/10W
R288	1-216-067-00	RES, CHIP	5.6K	5%	1/10W
R289	1-216-067-00	RES, CHIP	5.6K	5%	1/10W
R290	1-216-025-91	RES, CHIP	100	5%	1/10W
(KV-32FV15/36FV1534FV15/34FV15C/34FV15K/34FV15T/38FV15K only)					
R291	1-216-067-00	RES, CHIP	5.6K	5%	1/10W
R292	1-216-295-91	SHORT			
R293	1-216-025-91	RES, CHIP	100	5%	1/10W
R294	1-216-077-00	RES, CHIP	15K	5%	1/10W
R295	1-216-025-91	RES, CHIP	100	5%	1/10W
R296	1-216-025-91	RES, CHIP	100	5%	1/10W
R297	1-216-025-91	RES, CHIP	100	5%	1/10W
R298	1-216-295-91	SHORT			
R300	1-216-025-91	RES, CHIP	100	5%	1/10W
R301	1-216-049-91	RES, CHIP	1K	5%	1/10W
R302	1-216-295-91	SHORT			
R902	1-249-405-11	CARBON	100	5%	1/4W
R921	1-249-405-11	CARBON	100	5%	1/4W
R923	1-249-405-11	CARBON	100	5%	1/4W
R925	1-249-405-11	CARBON	100	5%	1/4W
(KV-32FV15/36FV1534FV15/34FV15C/34FV15K/34FV15T/38FV15K only)					
R926	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1055	1-216-073-00	RES, CHIP	10K	5%	1/10W
R1056	1-216-073-00	RES, CHIP	10K	5%	1/10W
R1057	1-216-025-91	RES, CHIP	100	5%	1/10W
R1058	1-216-025-91	RES, CHIP	100	5%	1/10W
R1059	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R1060	1-216-073-00	RES, CHIP	10K	5%	1/10W
R1062	1-216-025-91	RES, CHIP	100	5%	1/10W
R1063	1-216-073-00	RES, CHIP	10K	5%	1/10W
R1064	1-216-073-00	RES, CHIP	10K	5%	1/10W
R1065	1-216-025-91	RES, CHIP	100	5%	1/10W
R1070	1-216-025-91	RES, CHIP	100	5%	1/10W
R1205	1-216-295-91	SHORT			
R1207	1-208-774-11	RES, CHIP	470	0.50%	1/10W
R1209	1-216-295-91	SHORT			
R1210	1-216-295-91	SHORT			
R1215	1-208-774-11	RES, CHIP	470	0.50%	1/10W
R1216	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R1217	1-216-091-00	RES, CHIP	56K	5%	1/10W
R1218	1-216-295-91	SHORT			
R1219	1-216-073-00	RES, CHIP	10K	5%	1/10W
R1220	1-216-013-00	RES, CHIP	33	5%	1/10W
R1221	1-216-121-91	RES, CHIP	1M	5%	1/10W
R1222	1-216-073-00	RES, CHIP	10K	5%	1/10W
R1223	1-216-097-91	RES, CHIP	100K	5%	1/10W
R1224	1-216-089-91	RES, CHIP	47K	5%	1/10W
R1225	1-216-097-91	RES, CHIP	100K	5%	1/10W

REF.NO.	PART NO.	DESCRIPTION			REMARK
R1227	1-216-073-00	RES, CHIP	10K	5%	1/10W
R1228	1-208-774-11	RES, CHIP	470	0.50%	1/10W
R1229	1-216-121-91	RES, CHIP	1M	5%	1/10W
R1230	1-216-073-00	RES, CHIP	10K	5%	1/10W
R1231	1-216-295-91	SHORT			
R1233	1-216-097-91	RES, CHIP	100K	5%	1/10W
R1234	1-216-091-00	RES, CHIP	56K	5%	1/10W
R1235	1-216-013-00	RES, CHIP	33	5%	1/10W
R1236	1-216-097-91	RES, CHIP	100K	5%	1/10W
R1237	1-216-089-91	RES, CHIP	47K	5%	1/10W
R1238	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R1239	1-208-774-11	RES, CHIP	470	0.50%	1/10W
R1242	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R1243	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R1244	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1245	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1260	1-216-295-91	SHORT			
R1263	1-216-295-91	SHORT			
R1264	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1265	1-216-001-00	RES, CHIP	10	5%	1/10W
R1266	1-216-041-00	RES, CHIP	470	5%	1/10W
(KV-32FV15/36FV1534FV15/34FV15C/34FV15K/34FV15T/38FV15K only)					
R1267	1-216-025-91	RES, CHIP	100	5%	1/10W
R1268	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1269	1-216-041-00	RES, CHIP	470	5%	1/10W
(KV-32FV15/36FV1534FV15/34FV15C/34FV15K/34FV15T/38FV15K only)					
R1270	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1271	1-216-001-00	RES, CHIP	10	5%	1/10W
R1272	1-216-655-11	RES, CHIP	1.5K	0.50%	1/10W
R1273	1-208-788-11	RES, CHIP	1.8K	0.50%	1/10W
R1274	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1276	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1277	1-216-025-91	RES, CHIP	100	5%	1/10W
(KV-32FV15/36FV1534FV15/34FV15C/34FV15K/34FV15T/38FV15K only)					
R1279	1-216-025-91	RES, CHIP	100	5%	1/10W
R1284	1-216-295-91	SHORT			
R1287	1-216-295-91	SHORT			
R1288	1-216-295-91	SHORT			
R1289	1-216-295-91	SHORT			
R1290	1-216-295-91	SHORT			
R1291	1-216-295-91	SHORT			
R1292	1-216-295-91	SHORT			
R1293	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1294	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1295	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1300	1-216-049-91	RES, CHIP	1K	5%	1/10W
R1304	1-216-041-00	RES, CHIP	470	5%	1/10W
R1305	1-208-776-11	RES, CHIP	560	0.50%	1/10W
R1306	1-216-025-91	RES, CHIP	100	5%	1/10W
R1307	1-216-041-00	RES, CHIP	470	5%	1/10W
R1308	1-208-776-11	RES, CHIP	560	0.50%	1/10W
R1309	1-216-025-91	RES, CHIP	100	5%	1/10W
R2015	1-216-081-00	RES, CHIP	22K	5%	1/10W
R2016	1-216-069-00	RES, CHIP	6.8K	5%	1/10W
R2017	1-216-295-91	SHORT			

UY COMPLETE PARTS LISTING

REF.NO.	PART NO.	DESCRIPTION			REMARK
R2018	1-216-295-91	SHORT			
R2021	1-216-081-00	RES, CHIP	22K	5%	1/10W
R2027	1-216-049-91	RES, CHIP	1K	5%	1/10W
R2028	1-216-049-91	RES, CHIP	1K	5%	1/10W
R2029	1-216-043-91	RES, CHIP	560	5%	1/10W
R2030	1-216-043-91	RES, CHIP	560	5%	1/10W
R2031	1-216-081-00	RES, CHIP	22K	5%	1/10W
R2032	1-216-067-00	RES, CHIP	5.6K	5%	1/10W
R2033	1-208-790-11	RES, CHIP	2.2K	0.50%	1/10W
R2034	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R2035	1-216-049-91	RES, CHIP	1K	5%	1/10W
R2036	1-208-775-11	RES, CHIP	510	0.50%	1/10W
R2037	1-208-784-11	RES, CHIP	1.2K	0.50%	1/10W
R2038	1-208-762-11	RES, CHIP	150	0.50%	1/10W
R2039	1-216-047-91	RES, CHIP	820	5%	1/10W
R2040	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R2041	1-216-047-91	RES, CHIP	820	5%	1/10W
R2042	1-216-075-00	RES, CHIP	12K	5%	1/10W
R2043	1-216-085-00	RES, CHIP	33K	5%	1/10W
R2044	1-208-790-11	RES, CHIP	2.2K	0.50%	1/10W
R2046	1-216-075-00	RES, CHIP	12K	5%	1/10W
R2047	1-216-085-00	RES, CHIP	33K	5%	1/10W
R2048	1-216-049-91	RES, CHIP	1K	5%	1/10W
R2050	1-216-017-91	RES, CHIP	47	5%	1/10W
R2051	1-216-049-91	RES, CHIP	1K	5%	1/10W
R2055	1-216-017-91	RES, CHIP	47	5%	1/10W
R2057	1-216-049-91	RES, CHIP	1K	5%	1/10W
R2060	1-216-025-91	RES, CHIP	100	5%	1/10W
R2069	1-208-774-11	RES, CHIP	470	0.50%	1/10W
R2070	1-216-615-91	METAL	33	0.50%	1/10W
R2071	1-216-067-00	RES, CHIP	5.6K	5%	1/10W
R2072	1-216-043-91	RES, CHIP	560	5%	1/10W
R2073	1-216-049-91	RES, CHIP	1K	5%	1/10W
R2074	1-216-025-91	RES, CHIP	100	5%	1/10W
R2081	1-216-075-00	RES, CHIP	12K	5%	1/10W
R2201	1-216-022-00	RES, CHIP	75	5%	1/10W
R2202	1-216-022-00	RES, CHIP	75	5%	1/10W
R2203	1-216-022-00	RES, CHIP	75	5%	1/10W
R3511	1-216-295-91	SHORT			
R3527	1-216-033-00	RES, CHIP	220	5%	1/10W
R3582	1-216-033-00	RES, CHIP	220	5%	1/10W
R3583	1-216-061-00	RES, CHIP	3.3K	5%	1/10W
R3584	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R3585	1-216-061-00	RES, CHIP	3.3K	5%	1/10W
R3586	1-216-295-91	SHORT			
R3590	1-216-295-91	SHORT			
R3591	1-216-295-91	SHORT			
R3592	1-216-091-00	RES, CHIP	56K	5%	1/10W
R3593	1-216-043-91	RES, CHIP	560	5%	1/10W
R3594	1-216-295-91	SHORT			
R3595	1-216-295-91	SHORT			
R3599	1-216-295-91	SHORT			

REF.NO.	PART NO.	DESCRIPTION	REMARK

UY

PIP SCHEMATIC (FOR UY MAIN COMPONENTS SEE PAGE 114)

- *** A-1394-938-A UY BOARD, COMPLETE (KV-32FS10/34FV10/36FS10 only)**
- *** A-1394-943-A UY BOARD, COMPLETE (KV-32FV15/36FV15 only)**
- *** A-1394-944-A UY BOARD, COMPLETE (KV-34FV15/34FV15C/34FV15K/34FV15T/38FV15K only)**

CAPACITOR

REF.NO.	PART NO.	DESCRIPTION			REMARK
C3301	1-104-664-11	ELECT	47µF	20%	25V
C3302	1-163-031-11	CERAMIC	0.01µF		50V
C3319	1-163-031-11	CERAMIC	0.01µF		50V
C3320	1-126-960-11	ELECT	1µF	20%	50V
C3321	1-163-231-11	CERAMIC	15pF	5%	50V
C3322	1-163-231-11	CERAMIC	15pF	5%	50V

(KV-32FV15/36FV1534FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

REF.NO.	PART NO.	DESCRIPTION			REMARK
C3323	1-163-031-11	CERAMIC	0.01µF		50V

(KV-32FV15/36FV1534FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

REF.NO.	PART NO.	DESCRIPTION			REMARK
C3324	1-126-926-11	ELECT	1000µF	20%	10V
C3325	1-126-926-11	ELECT	1000µF	20%	10V
C3328	1-126-925-11	ELECT	470µF	20%	10V
C3329	1-104-664-11	ELECT	47µF	20%	16V
C3330	1-163-031-11	CERAMIC	0.01µF		50V

(KV-32FV15/36FV1534FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

REF.NO.	PART NO.	DESCRIPTION			REMARK
C3331	1-104-664-11	ELECT	47µF	20%	16V
C3332	1-104-664-11	ELECT	47µF	20%	25V
C3334	1-163-031-11	CERAMIC	0.01µF		50V
C3340	1-163-031-11	CERAMIC	0.01µF		50V
C3342	1-163-009-11	CERAMIC	0.001µF	10%	50V

(KV-32FV15/36FV1534FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

REF.NO.	PART NO.	DESCRIPTION			REMARK
C3346	1-163-251-11	CERAMIC	100pF	5%	50V
C3347	1-126-960-11	ELECT	1µF	20%	50V
C3348	1-104-664-11	ELECT	47µF	20%	16V
C3349	1-163-249-11	CERAMIC	82pF	5%	50V
C3350	1-164-004-11	CERAMIC	0.1µF	10%	25V

(KV-32FV15/36FV1534FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

REF.NO.	PART NO.	DESCRIPTION			REMARK
C3352	1-163-031-11	CERAMIC	0.01µF		50V
C3353	1-126-960-11	ELECT	1µF	20%	50V
C3354	1-163-031-11	CERAMIC	0.01µF		50V
C3355	1-126-967-11	ELECT	47µF	20%	50V
C3356	1-163-038-91	CERAMIC	0.1µF		25V

(KV-32FV15/36FV1534FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

REF.NO.	PART NO.	DESCRIPTION			REMARK
C3357	1-163-038-91	CERAMIC	0.1µF		25V
C3358	1-163-038-91	CERAMIC	0.1µF		25V
C3359	1-163-038-91	CERAMIC	0.1µF		25V
C3360	1-163-038-91	CERAMIC	0.1µF		25V
C3361	1-163-038-91	CERAMIC	0.1µF		25V

(KV-32FV15/36FV1534FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

REF.NO.	PART NO.	DESCRIPTION			REMARK
C3362	1-126-967-11	ELECT	47µF	20%	50V
C3363	1-163-031-11	CERAMIC	0.01µF		50V
C3364	1-163-229-11	CERAMIC	12pF	5%	50V
C3365	1-163-133-00	CERAMIC	470pF	5%	50V
C3366	1-126-959-11	ELECT	0.47µF	20%	50V

(KV-32FV15/36FV1534FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

REF.NO.	PART NO.	DESCRIPTION			REMARK
C3367	1-126-963-11	ELECT	4.7µF	20%	50V
C3368	1-164-005-11	CERAMIC	0.47µF		25V
C3369	1-163-251-11	CERAMIC	100pF	5%	50V
C3370	1-126-960-11	ELECT	1µF	20%	50V
C3371	1-163-017-00	CERAMIC	0.0047µF	10%	50V
C3372	1-164-005-11	CERAMIC	0.47µF		25V

(KV-32FV15/36FV15/34FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

REF.NO.	PART NO.	DESCRIPTION			REMARK
C3377	1-164-004-11	CERAMIC	0.1µF	10%	25V
C3378	1-163-006-11	CERAMIC	560pF	10%	50V
C3380	1-164-004-11	CERAMIC	0.1µF	10%	25V
C3381	1-163-019-00	CERAMIC	0.0068µF	10%	50V
C3382	1-164-344-11	CERAMIC	0.068µF	10%	25V
C3383	1-126-956-91	ELECT	0.1µF	20%	50V

(KV-32FV15/36FV15 only)

REF.NO.	PART NO.	DESCRIPTION			REMARK
C3385	1-126-941-11	ELECT	470µF	20%	25V

(KV-32FV15/36FV15/34FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

FERRITE BEAD

REF.NO.	PART NO.	DESCRIPTION
FB3301	1-414-234-22	INDUCTOR
FB3302	1-414-234-22	INDUCTOR

(KV-32FV15/36FV15/34FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

IC

REF.NO.	PART NO.	DESCRIPTION
IC3302	8-759-358-38	IC NJM78M05DLA(TE1)
IC3303	8-759-533-89	IC SDA9288XE-GEG-B12
IC3304	8-752-086-80	IC CXA2019AQ-T4

(KV-32FV15/36FV15/34FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

IC3307 8-759-575-50 IC Z8613012SSC
(KV-32FV15/36FV15 only)

IC3308 8-759-932-69 IC BU4053BCF-T2
(KV-32FV15/36FV15/34FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

COIL

REF.NO.	PART NO.	DESCRIPTION	
L3301	1-414-856-11	INDUCTOR	10µH
L3302	1-410-473-11	INDUCTOR	18µH
L3303	1-410-473-11	INDUCTOR	18µH
L3305	1-408-619-31	INDUCTOR	220µH
L3306	1-414-857-11	INDUCTOR	100µH
L3307	1-414-856-11	INDUCTOR	10µH

(KV-32FV15/36FV15/34FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

UY COMPLETE PARTS LISTING

TRANSISTOR

REF.NO.	PART NO.	DESCRIPTION			REMARK
Q3301	8-729-422-27	TRANSISTOR 2SD601A-Q			
Q3302	8-729-216-22	TRANSISTOR 2SA1162-G			
Q3305	8-729-216-22	TRANSISTOR 2SA1162-G			
Q3306	8-729-216-22	TRANSISTOR 2SA1162-G			

(KV-32FV15/36FV15/34FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

REF.NO.	PART NO.	DESCRIPTION			REMARK
Q3307	8-729-216-22	TRANSISTOR 2SA1162-G			
Q3310	8-729-422-27	TRANSISTOR 2SD601A-Q			
Q3312	8-729-216-22	TRANSISTOR 2SA1162-G			
Q3314	8-729-216-22	TRANSISTOR 2SA1162-G			

(KV-32FV15/36FV15/34FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

REF.NO.	PART NO.	DESCRIPTION			REMARK
Q3322	8-729-422-27	TRANSISTOR 2SD601A-Q			

(KV-32FV15/36FV15 only)

RESISTOR

REF.NO.	PART NO.	DESCRIPTION			REMARK
R3301	1-216-295-91	SHORT			

(KV-32FV15/36FV15/34FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

REF.NO.	PART NO.	DESCRIPTION			REMARK
R3303	1-216-295-91	SHORT			

REF.NO.	PART NO.	DESCRIPTION			REMARK
R3304	1-216-295-91	SHORT			
R3305	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R3306	1-216-295-91	SHORT			

(KV-32FV15/36FV15/34FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

REF.NO.	PART NO.	DESCRIPTION			REMARK
R3308	1-216-295-91	SHORT			

(KV-32FV15/36FV15 only)

REF.NO.	PART NO.	DESCRIPTION			REMARK
R3309	1-216-041-00	RES, CHIP	470	5%	1/10W
R3312	1-216-037-00	RES, CHIP	330	5%	1/10W
R3313	1-216-295-91	SHORT			
R3314	1-216-049-91	RES, CHIP	1K	5%	1/10W
R3320	1-216-295-91	SHORT			

(KV-32FV15/36FV15/34FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

REF.NO.	PART NO.	DESCRIPTION			REMARK
R3322	1-216-065-91	RES, CHIP	4.7K	5%	1/10W

(KV-32FV15/36FV15/34FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

REF.NO.	PART NO.	DESCRIPTION			REMARK
R3322	1-216-295-91	SHORT			

(KV-32FS10/34FV10/36FS10 only)

REF.NO.	PART NO.	DESCRIPTION			REMARK
R3323	1-216-065-91	RES, CHIP	4.7K	5%	1/10W

(KV-32FV15/36FV15/34FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

REF.NO.	PART NO.	DESCRIPTION			REMARK
R3323	1-216-295-91	SHORT			

(KV-32FS10/34FV10/36FS10 only)

REF.NO.	PART NO.	DESCRIPTION			REMARK
R3324	1-216-065-91	RES, CHIP	4.7K	5%	1/10W

(KV-32FV15/36FV15/34FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

REF.NO.	PART NO.	DESCRIPTION			REMARK
R3324	1-216-295-91	SHORT			

(KV-32FS10/34FV10/36FS10 only)

REF.NO.	PART NO.	DESCRIPTION			REMARK
R3325	1-216-025-91	RES, CHIP	100	5%	1/10W

(KV-32FV15/36FV15 only)

REF.NO.	PART NO.	DESCRIPTION			REMARK
R3326	1-216-295-91	SHORT			
R3329	1-216-069-00	RES, CHIP	6.8K	5%	1/10W
R3332	1-216-033-00	RES, CHIP	220	5%	1/10W
R3337	1-216-033-00	RES, CHIP	220	5%	1/10W
R3338	1-216-033-00	RES, CHIP	220	5%	1/10W

(KV-32FV15/36FV15/34FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

REF.NO.	PART NO.	DESCRIPTION			REMARK
R3339	1-216-049-91	RES, CHIP	1K	5%	1/10W
R3340	1-216-041-00	RES, CHIP	470	5%	1/10W
R3341	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R3342	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R3343	1-216-049-91	RES, CHIP	1K	5%	1/10W

(KV-32FV15/36FV15/34FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

REF.NO.	PART NO.	DESCRIPTION			REMARK
R3346	1-216-049-91	RES, CHIP	1K	5%	1/10W
R3350	1-216-295-91	SHORT			
R3351	1-216-295-91	SHORT			
R3352	1-216-049-91	RES, CHIP	1K	5%	1/10W
R3355	1-216-295-91	SHORT			

(KV-32FV15/36FV15/34FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

REF.NO.	PART NO.	DESCRIPTION			REMARK
R3357	1-216-295-91	SHORT			
R3358	1-216-047-91	RES, CHIP	820	5%	1/10W
R3359	1-216-047-91	RES, CHIP	820	5%	1/10W
R3360	1-216-053-00	RES, CHIP	1.5K	5%	1/10W
R3361	1-216-045-00	RES, CHIP	680	5%	1/10W

(KV-32FV15/36FV15/34FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

REF.NO.	PART NO.	DESCRIPTION			REMARK
R3362	1-208-768-11	RES, CHIP	240	0.50%	1/10W
R3363	1-208-766-11	RES, CHIP	220	0.50%	1/10W
R3364	1-208-769-11	RES, CHIP	300	0.50%	1/10W
R3370	1-216-295-91	SHORT			
R3375	1-216-041-00	RES, CHIP	470	5%	1/10W

(KV-32FV15/36FV15/34FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

REF.NO.	PART NO.	DESCRIPTION			REMARK
R3376	1-216-071-00	RES, CHIP	8.2K	5%	1/10W
R3377	1-216-073-00	RES, CHIP	10K	5%	1/10W
R3378	1-216-053-00	RES, CHIP	1.5K	5%	1/10W
R3379	1-216-077-00	RES, CHIP	15K	5%	1/10W
R3380	1-216-295-91	SHORT			
R3381	1-216-295-91	SHORT			

(KV-32FV15/36FV15/34FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

REF.NO.	PART NO.	DESCRIPTION			REMARK
R3382	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R3383	1-216-025-91	RES, CHIP	100	5%	1/10W
R3384	1-216-033-00	RES, CHIP	220	5%	1/10W
R3385	1-216-109-00	RES, CHIP	330K	5%	1/10W
R3387	1-216-295-91	SHORT			
R3388	1-216-295-91	SHORT			

(KV-32FV15/36FV15/34FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

REF.NO.	PART NO.	DESCRIPTION			REMARK
R3392	1-216-295-91	SHORT			
R3393	1-216-025-91	RES, CHIP	100	5%	1/10W
R3394	1-216-041-00	RES, CHIP	470	5%	1/10W

(KV-32FV15/36FV15 only)

REF.NO.	PART NO.	DESCRIPTION			REMARK
R3395	1-216-061-91	RES, CHIP	3.3K	5%	1/10W

(KV-32FV15/36FV15/34FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

REF.NO.	PART NO.	DESCRIPTION			REMARK
R3398	1-216-069-00	RES, CHIP	6.8K	5%	1/10W
R3399	1-216-025-91	RES, CHIP	100	5%	1/10W
R3401	1-216-025-91	RES, CHIP	100	5%	1/10W
R3402	1-216-025-91	RES, CHIP	100	5%	1/10W
R3404	1-216-073-00	RES, CHIP	10K	5%	1/10W

(KV-32FV15/36FV15 only)

CRYSTAL

REF.NO.	PART NO.	DESCRIPTION			REMARK
X3302	1-760-095-21	VIBRATOR, CRYSTAL			
X3303	1-577-611-11	OSCILLATOR CERAMIC			
X3304	1-567-505-11	OSCILLATOR CRYSTAL			

(KV-32FV15/36FV15/34FV15/34FV15C/34FV15K/34FV15T/38FV15K only)

WA

*** A-1375-187-A WA BOARD, COMPLETE (All Models)**

4-382-854-11 SCREW (M3X10), P, SW (+)

CAPACITOR

REF.NO.	PART NO.	DESCRIPTION				REMARK
C941	1-126-942-61	ELECT	1000µF	20%	25V	
C944	1-126-964-11	ELECT	10µF	20%	50V	
C946	1-104-665-11	ELECT	100µF	20%	25V	
C947	1-104-664-11	ELECT	47µF	20%	25V	
C949	1-161-830-00	CERAMIC	0.0047µF		500V	
C950	1-126-941-11	ELECT	470µF	20%	25V	
C951	1-107-645-11	ELECT	22µF	20%	160V	
C952	1-104-999-11	MYLAR	0.1µF	10%	200V	
C953	1-106-383-00	MYLAR	0.047µF	10%	200V	
C954	1-130-471-00	FILM	0.001µF	5%	50V	
C955	1-107-667-11	ELECT	2.2µF	20%	160V	
C956	1-130-471-00	FILM	0.001µF	5%	50V	
C957	1-106-383-00	MYLAR	0.047µF	10%	200V	
C958	1-126-941-11	ELECT	470µF	20%	25V	
C960	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V	
C961	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C962	1-126-964-11	ELECT	10µF	20%	50V	
C963	1-126-964-11	ELECT	10µF	20%	50V	
C964	1-110-501-11	CERAMIC CHIP	0.33µF	10%	16V	
C965	1-104-664-11	ELECT	47µF	20%	25V	
C966	1-126-960-11	ELECT	1µF	20%	50V	
C967	1-126-964-11	ELECT	10µF	20%	50V	
C968	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V	
C970	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V	
C971	1-104-664-11	ELECT	47µF	20%	25V	
C972	1-163-251-11	CERAMIC CHIP	100pF	5%	50V	
C973	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V	
C974	1-137-370-11	FILM	0.01µF	5%	50V	
C976	1-130-967-00	FILM	0.0027µF	5%	50V	
C977	1-104-760-11	CERAMIC CHIP	0.047µF	10%	50V	
C1941	1-126-941-11	ELECT	470µF	20%	25V	
C1946	1-136-165-00	FILM	0.1µF	5%	50V	
C1947	1-136-165-00	FILM	0.1µF	5%	50V	
C1948	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V	
C1949	1-126-934-11	ELECT	220µF	20%	16V	
C1961	1-129-725-00	FILM	0.082µF	5%	400V	
C1962	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V	
C1965	1-136-601-11	FILM	0.01µF	5%	630V	
C1966	1-137-378-11	FILM	0.22µF	5%	50V	
C1968	1-137-378-11	FILM	0.22µF	5%	50V	
C1972	1-104-664-11	ELECT	47µF	20%	25V	
C1974	1-104-664-11	ELECT	47µF	20%	25V	

CONNECTOR

REF.NO.	PART NO.	DESCRIPTION	REMARK
CN941	* 1-564-511-11	PLUG, CONNECTOR 8P	
CN942	* 1-564-508-11	PLUG, CONNECTOR 5P	
CN961	* 1-770-723-11	CONNECTOR, BOARD TO BOARD 8P	
CN981	* 1-564-506-11	PLUG, CONNECTOR 3P	

DIODE

REF.NO.	PART NO.	DESCRIPTION	REMARK
D941	8-719-991-33	DIODE 1SS133T-77	
D943	8-719-991-33	DIODE 1SS133T-77	
D944	8-719-991-33	DIODE 1SS133T-77	
D945	8-719-109-89	DIODE RD5.6ESB2	
D946	8-719-110-88	DIODE RD39ESB2	
D947	8-719-110-88	DIODE RD39ESB2	
D962	8-719-991-33	DIODE 1SS133T-77	
D963	8-719-404-50	DIODE MA111-TX	
D964	8-719-210-21	DIODE 11EQS04	
D966	8-719-302-43	DIODE EL1Z	
D1961	8-719-991-33	DIODE 1SS133T-77	
D1962	8-719-991-33	DIODE 1SS133T-77	

IC

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC961	8-759-803-42	IC LA6500-FA	
IC962	8-759-729-03	IC NJM2903D	
IC963	8-759-729-03	IC NJM2903D	
IC964	8-759-700-42	IC NJM2904D	
IC965	8-759-701-59	IC NJM78M09FA	

COIL

REF.NO.	PART NO.	DESCRIPTION		REMARK
L961	1-459-111-00	INDUCTOR	10MMH	
L964	1-406-989-21	INDUCTOR	10MMH	

TRANSISTOR

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q941	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q942	8-729-216-22	TRANSISTOR 2SA1162-G	
Q943	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q944	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q945	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q946	8-729-045-05	TRANSISTOR 2SA2005	
Q947	8-729-045-04	TRANSISTOR 2SC5511	
Q948	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q949	8-729-216-22	TRANSISTOR 2SA1162-G	
Q961	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q962	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q963	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q965	8-729-931-45	TRANSISTOR IRF614	
Q966	8-729-216-22	TRANSISTOR 2SA1162-G	
Q967	8-729-140-97	TRANSISTOR 2SB734-34	
Q968	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q969	8-729-422-27	TRANSISTOR 2SD601A-Q	

WA COMPLETE PARTS LISTING

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q1961	8-729-140-97	TRANSISTOR 2SB734-34	
Q1963	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1964	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1966	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1967	8-729-216-22	TRANSISTOR 2SA1162-G	

RESISTOR

REF.NO.	PART NO.	DESCRIPTION				REMARK
R943	1-216-033-00	RES, CHIP	220	5%	1/10W	
R944	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R945	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R946	1-215-886-11	METAL OXIDE	100	5%	2W	F
R947	1-216-025-91	RES, CHIP	100	5%	1/10W	
R949	1-216-057-00	RES, CHIP	2.2K	5%	1/10W	
R950	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R951	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R952	1-216-041-00	RES, CHIP	470	5%	1/10W	
R953	1-216-021-00	RES, CHIP	68	5%	1/10W	
R954	1-216-033-00	RES, CHIP	220	5%	1/10W	
R955	1-216-047-91	RES, CHIP	820	5%	1/10W	
R956	1-216-025-91	RES, CHIP	100	5%	1/10W	
R957	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R958	1-216-025-91	RES, CHIP	100	5%	1/10W	
R959	1-216-021-00	RES, CHIP	68	5%	1/10W	
R960	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	
R961	1-216-091-00	RES, CHIP	56K	5%	1/10W	
R962	1-216-081-00	RES, CHIP	22K	5%	1/10W	
R963	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	
R964	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R965	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R966	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R967	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R968	1-216-061-00	RES, CHIP	3.3K	5%	1/10W	
R969	1-216-025-91	RES, CHIP	100	5%	1/10W	
R970	1-208-822-11	RES, CHIP	47K	0.50%	1/10W	
R971	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R972	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	
R973	1-216-057-00	RES, CHIP	2.2K	5%	1/10W	
R974	1-208-808-11	RES, CHIP	12K	0.50%	1/10W	
R975	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R976	1-216-057-00	RES, CHIP	2.2K	5%	1/10W	
R977	1-249-401-11	CARBON	47	5%	1/4W	F
R978	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R979	1-216-033-00	RES, CHIP	220	5%	1/10W	
R980	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R981	1-216-081-00	RES, CHIP	22K	5%	1/10W	
R982	1-216-055-00	RES, CHIP	1.8K	5%	1/10W	
R983	1-214-657-11	METAL	1	1%	1/4W	
R984	1-249-383-11	CARBON	1.5	5%	1/4W	F
R985	1-215-421-00	METAL	1K	1%	1/4W	
R986	1-216-057-00	RES, CHIP	2.2K	5%	1/10W	
R988	1-215-429-00	METAL	2.2K	1%	1/4W	
R990	1-216-025-91	RES, CHIP	100	5%	1/10W	
R991	1-208-800-11	RES, CHIP	5.6K	0.50%	1/10W	
R992	1-208-794-11	RES, CHIP	3.3K	0.50%	1/10W	

REF.NO.	PART NO.	DESCRIPTION				REMARK
R993	1-216-049-91	RES, CHIP	1K	5%	1/10W	
R994	1-216-025-91	RES, CHIP	100	5%	1/10W	
R995	1-216-051-00	RES, CHIP	1.2K	5%	1/10W	F
R1941	1-260-312-11	CARBON	47	5%	1/2W	F
R1942	1-249-387-11	CARBON	3.3	5%	1/4W	F
R1943	1-249-414-11	CARBON	560	5%	1/4W	F
R1944	1-249-432-11	CARBON	18K	5%	1/4W	
R1945	1-215-914-11	METAL OXIDE	330	5%	3W	F
R1946	1-249-417-11	CARBON	1K	5%	1/4W	F
R1947	1-249-432-11	CARBON	18K	5%	1/4W	
R1948	1-249-414-11	CARBON	560	5%	1/4W	
R1949	1-249-387-11	CARBON	3.3	5%	1/4W	F
R1950	1-249-401-11	CARBON	47	5%	1/4W	F
R1951	1-216-097-91	RES, CHIP	100K	5%	1/10W	
R1952	1-216-097-91	RES, CHIP	100K	5%	1/10W	
R1953	1-216-085-00	RES, CHIP	33K	5%	1/10W	
R1954	1-216-089-91	RES, CHIP	47K	5%	1/10W	
R1955	1-208-808-11	RES, CHIP	12K	0.50%	1/10W	
R1956	1-216-057-00	RES, CHIP	2.2K	5%	1/10W	
R1957	1-216-295-91	SHORT				
R1958	1-216-061-00	RES, CHIP	3.3K	5%	1/10W	
R1959	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R1960	1-216-037-00	RES, CHIP	330	5%	1/10W	
R1961	1-208-824-11	RES, CHIP	56K	0.50%	1/10W	
R1962	1-208-806-11	RES, CHIP	10K	0.50%	1/10W	
R1963 ⚠	1-216-033-00	RES, CHIP	220	5%	1/10W	
R1964	1-216-057-00	RES, CHIP	2.2K	5%	1/10W	
R1967	1-215-489-00	METAL	680K	1%	1/4W	
R1969	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R1970	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	
R1971	1-216-121-91	RES, CHIP	1M	5%	1/10W	
R1972	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R1973	1-216-035-00	RES, CHIP	270	5%	1/10W	
R1975	1-216-067-00	RES, CHIP	5.6K	5%	1/10W	
R1976	1-216-295-91	SHORT				
R1978	1-216-025-91	RES, CHIP	100	5%	1/10W	
R1980	1-216-041-00	RES, CHIP	470	5%	1/10W	
R1981	1-216-081-00	RES, CHIP	22K	5%	1/10W	
R1982	1-216-081-00	RES, CHIP	22K	5%	1/10W	
R1983	1-216-073-00	RES, CHIP	10K	5%	1/10W	
R1984	1-216-089-91	RES, CHIP	47K	5%	1/10W	
R1987	1-216-097-91	RES, CHIP	100K	5%	1/10W	
R1989	1-208-818-11	RES, CHIP	33K	0.50%	1/10W	
R1990	1-216-089-91	RES, CHIP	47K	5%	1/10W	
R1991	1-216-081-00	RES, CHIP	22K	5%	1/10W	
R1992	1-216-057-00	RES, CHIP	2.2K	5%	1/10W	
R2962	1-215-885-00	METAL OXIDE	68	5%	2W	F
R2963	1-215-885-00	METAL OXIDE	68	5%	2W	F
R2965	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	
R2968	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	
R2969	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	
R2971	1-216-089-91	RES, CHIP	47K	5%	1/10W	
R2972	1-216-113-00	RES, CHIP	470K	5%	1/10W	
R2973	1-216-025-91	RES, CHIP	100	5%	1/10W	

REF.NO.	PART NO.	DESCRIPTION			REMARK
R2975	1-216-061-00	RES, CHIP	3.3K	5%	1/10W
R2976	1-216-025-91	RES, CHIP	100	5%	1/10W
R2979	1-216-097-91	RES, CHIP	100K	5%	1/10W
R2980	1-216-097-91	RES, CHIP	100K	5%	1/10W

VARIABLE RESISTOR

RV941	1-238-019-11	RES, ADJ, CARBON	47K

ACCESSORIES AND PACKING MATERIAL

3-866-305-21 MANUAL, INSTRUCTION (English)
(KV-32FS10/32FV15/32XBR250/36FS10/36FV15 only)
3-866-305-31 MANUAL, INSTRUCTION (French)
(KV-32FS10/32FV15/32XBR250/36FS10/36FV15/36XBR250 only)
3-866-305-41 MANUAL, INSTRUCTION (Spanish)
(KV-34FV10/34FV15/34FV15C34FX250C/38FX250/38FX250C only)

3-866-853-21 MANUAL, INSTRUCTION
(KV-36XBR250 only)
3-866-931-61 MANUAL, INSTRUCTION
(KV-34FV15K/38FV15K only)
3-866-936-71 MANUAL, INSTRUCTION
(KV-34FV15T/38FX250T only)

4-041-259-01 PROTECTION BAG
(KV-32FS10/34FV15K/34FV15T only)
4-053-658-01 PROTECTION BAG
(KV-32FV15/32XBR250/34FV10/34FV15/34FV15C/34FX250C only)
4-066-646-01 PROTECTION BAG
(KV-36FS10/36FV15/36XBR250/38FV15K/38FX250/38FX250C/
38FX250T only)

4-068-789-01 CUSHION ASSY, LOWER
(KV-32FV15/32XBR250/34FV15K/34FV15T only)
4-068-789-11 CUSHION ASSY, LOWER
(KV-32FS10/34FV10/34FV15/34FV15C only)
4-068-884-01 CUSHION ASSY, LOWER (KV-36FS10 only)
4-069-389-01 CUSHION ASSY, LOWER
(KV-34FX250C/36FV15/36XBR250/38FV15K/38FX250/38FX250C/
38FX250T only)

4-068-786-01 CUSHION ASSY, UPPER
(KV-32FV15/32XBR250/34FV15K/34FV15T/34FX250C only)
4-068-786-11 CUSHION ASSY, UPPER
(KV-32FS10/34FV10/34FV15/34FV15C only)
4-068-883-01 CUSHION ASSY, UPPER (KV-36FS10 only)
4-069-390-01 CUSHION ASSY, UPPER
(KV-36FV15/36XBR250/38FV15K/38FX250/38FX250C/38FX250T only)

4-069-471-01 CARTON
(KV-32FV15/34FV15K/34FV15T only)
4-069-471-11 CARTON
(KV-32FS10/34FV10/34FV15/34FV15C only)
4-069-515-01 CARTON
(KV-36FS10/36FV15/38FV15K/38FX250/38FX250C/38FX250Tonly)
4-070-553-01 CARTON
(KV-32XBR250/34FX250C only)
4-071-107-01 CARTON (KV-36XBR250 only)

REF.NO. PART NO. DESCRIPTION REMARK

REMOTE COMMANDER

1-418-387-11 REMOTE COMMANDER (RM-Y168)
(KV-32FS10/34FV10/36FS10 only)
1-418-465-11 REMOTE COMMANDER (RM-Y170)
(KV-32XBR250/34FX250C/36XBR250/38FX250/38FX250C/
38FX250T only)
1-418-496-11 REMOTE COMMANDER (RM-Y171)
(KV-32FV15/34FV15/34FV15C/34FV15K/34FV15T/36FV15 only)
1-475-069-21 REMOTE COMMANDER (RM-Y149A)
(KV-38FV15K only)

4-978-977-01 BATTERY COVER (for remote)
(RM-Y149A/RM-Y168/RM-Y170/RM-Y171)

NOTES:

Sony Corporation
Sony Technology Center
Product Quality Division
Service Promotion Department

9-965-868-02

English
99ET74407-01
Printed in USA
1999.5

SERVICE MANUAL AA2W Chassis

MODEL	DEST	COMMANDER	CHASSIS NO.
KV-32FS10	U.S.	RM-Y168	SCC-S32B-A
KV-32FS10	CND	RM-Y168	SCC-S33B-A
KV-36FS10	U.S.	RM-Y168	SCC-S32C-A
KV-36FS10	CND	RM-Y168	SCC-S33C-A
KV-32FV15	U.S.	RM-Y171	SCC-S32D-A
KV-32FV15	CND	RM-Y171	SCC-S33D-A
KV-34FV10	E	RM-Y168	SCC-S34E-A
KV-34FV15	E	RM-Y171	SCC-S34F-A
KV-34FV15C	E	RM-Y171	SCC-S34G-A
KV-34FV15K	KOREA	RM-Y149A	SCC-S31B-A
KV-34FV15T	TAIWAN	RM-Y171	SCC-S36A-A
KV-36FV15	U.S.	RM-Y171	SCC-S32G-A
KV-36FV15	CND	RM-Y171	SCC-S33G-A
KV-38FV15K	KOREA	RM-Y149A	SCC-S31C-A
KV-34FX250C	E	RM-Y170	SCC-S34H-A
KV-38FX250	E	RM-Y170	SCC-S34M-A
KV-38FX250C	E	RM-Y170	SCC-S34J-A
KV-38FX250T	TAIWAN	RM-Y170	SCC-S36B-A
KV-32XBR250	U.S.	RM-Y170	SCC-S32E-A
KV-32XBR250	CND	RM-Y170	SCC-S33E-A
KV-36XBR250	U.S.	RM-Y170	SCC-S32F-A
KV-36XBR250	CND	RM-Y170	SCC-S33F-A

CORRECTION-1

SUBJECT: A Board Schematic - Critical Component Identified

Correct the service manual as shown.
File this Correction with the service manual.

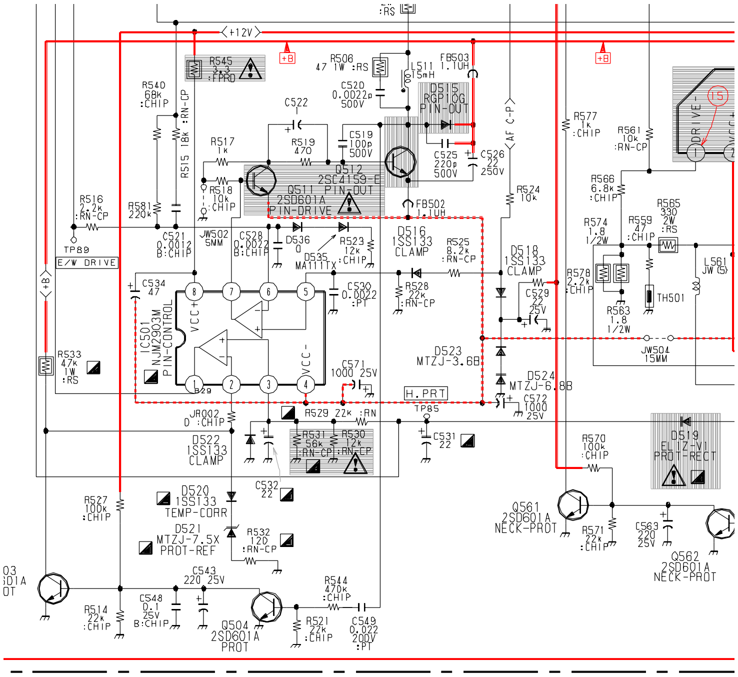
MICROFILM

TRINITRON® COLOR TV

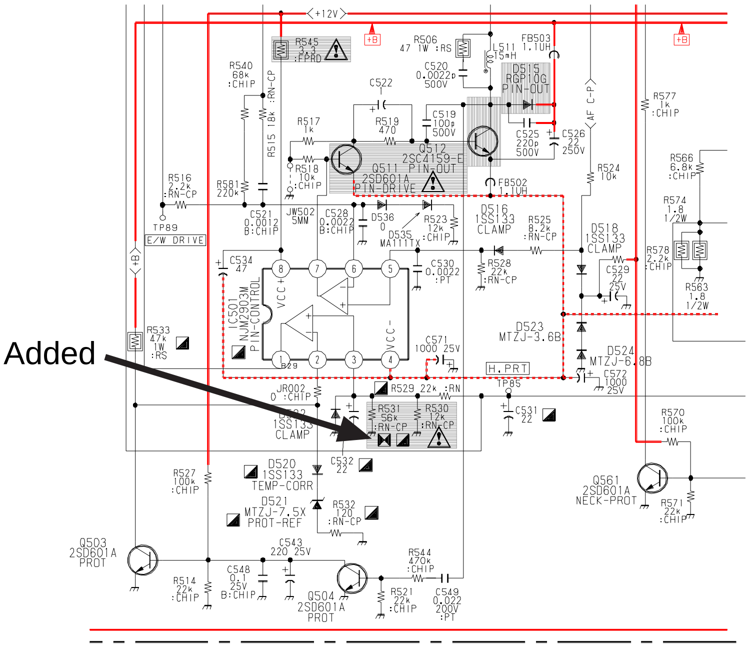
SONY®

Section 6: Schematic Diagram (Page 46) A Board
Critical Component Symbol Added

Incorrect


+12V
+B
R545 3.3 :FPRD
R506 47 1W :RS
L511 15mH
FB503 1.1UH
D515 RGP10G PIN-OUT
R540 68k :CHIP
C520 0.0022p 500V
C522
R517 1k
R519 470
C519 100p 500V
C525 220p 500V
C526 22 250V
AF C-P
Q512 2SC4159-E
Q511 PIN-OUT 2SD601A PIN-DRIVE
R518 10k :CHIP
R515 18k :RN-CP
R516 2.2k :RN-CP
R581 220k
TP89
E/W DRIVE
FB502 1.1UH
C521 0.0012 B:CHIP
JW502 5MM
C528 0.0022 B:CHIP
D536 0
R523 12k :CHIP
D535 MA111TX
D516 1SS133 CLAMP
R525 8.2k :RN-CP
D518 1SS133 CLAMP
R524 10k
C534 47
IC501 NJM2903M PIN-CONTROL
VCC+
VCC-
C530 0.0022 :PT
R528 22k :RN-CP
C529 22 25V
C571 1000 25V
D523 MTZJ-3.6B
D524 MTZJ-6.8B
C572 1000 25V
H.PRT
TP85
R533 47k 1W :RS
JR002 0 :CHIP
R529 22k :RN
D522 1SS133 CLAMP
R531 56k :RN-CP
R530 12k :RN-CP
C531 22
D520 1SS133 TEMP-CORR
C532 22
R527 100k :CHIP
D521 MTZJ-7.5X PROT-REF
R532 120 :RN-CP
C543 220 25V
R544 470k :CHIP
Q504 2SD601A PROT
R514 22k :CHIP
C548 0.1 25V B:CHIP
R521 22k :CHIP
C549 0.022 200V :PT
R577 1k :CHIP
R561 10k :RN-CP
R566 6.8k :CHIP
R565 330 2W :RS
R574 1.8 1/2W
R559 47 :CHIP
L561 JW (5)
R578 2.2k :CHIP
R563 1.8 1/2W
TH501
JW504 15MM
R570 100k :CHIP
D519 EL1Z-V1 PROT-RECT
Q561 2SD601A NECK-PROT
R571 22k :CHIP
C563 220 25V
Q562 2SD601A NECK-PROT
DRIVE-
15

Correct


Added
+12V
+B
R545 3.3 :FPRD
R506 47 1W :RS
L511 15mH
FB503 1.1UH
D515 RGP10G PIN-OUT
R540 68k :CHIP
C520 0.0022p 500V
C522
R517 1k
R519 470
C519 100p 500V
C525 220p 500V
C526 22 250V
AF C-P
Q512 2SC4159-E
Q511 PIN-OUT 2SD601A PIN-DRIVE
R518 10k :CHIP
R515 18k :RN-CP
R516 2.2k :RN-CP
R581 220k
TP89
E/W DRIVE
FB502 1.1UH
C521 0.0012 B:CHIP
JW502 5MM
C528 0.0022 B:CHIP
D536 0
R523 12k :CHIP
D535 MA111TX
D516 1SS133 CLAMP
R525 8.2k :RN-CP
D518 1SS133 CLAMP
R524 10k
C534 47
IC501 NJM2903M PIN-CONTROL
VCC+
VCC-
C530 0.0022 :PT
R528 22k :RN-CP
C529 22 25V
C571 1000 25V
D523 MTZJ-3.6B
D524 MTZJ-6.8B
C572 1000 25V
H.PRT
TP85
R533 47k 1W :RS
JR002 0 :CHIP
R529 22k :RN
D522 1SS133 CLAMP
R531 56k :RN-CP
R530 12k :RN-CP
C531 22
D520 1SS133 TEMP-CORR
C532 22
R527 100k :CHIP
D521 MTZJ-7.5X PROT-REF
R532 120 :RN-CP
C543 220 25V
R544 470k :CHIP
Q503 2SD601A PROT
Q504 2SD601A PROT
R514 22k :CHIP
C548 0.1 25V B:CHIP
R521 22k :CHIP
C549 0.022 200V :PT
R577 1k :CHIP
R566 6.8k :CHIP
R574 1.8 1/2W
R578 2.2k :CHIP
R563 1.8 1/2W
R570 100k :CHIP
Q561 2SD601A NECK-PROT
R571 22k :CHIP

9-965-868-91

Sony Corporation
Sony Technology Center
Product Quality Division
Service Promotion Department

English
99ET74418-01
Printed in USA
1999.5

SERVICE MANUAL AA-2W CHASSIS

MODEL	DEST.	COMMANDER	CHASSIS NO.
KV-32FS10	U.S.	RM-Y168	SCC-S32B-A
KV-32FS10	CND	RM-Y168	SCC-S33B-A
KV-36FS10	U.S.	RM-Y168	SCC-S32C-A
KV-36FS10	CND	RM-Y168	SCC-S33C-A
KV-32FV15	U.S.	RM-Y171	SCC-S32D-A
KV-32FV15	CND	RM-Y171	SCC-S33D-A
KV-34FV10	E	RM-Y168	SCC-S34E-A
KV-34FV15	E	RM-Y171	SCC-S34F-A
KV-34FV15C	E	RM-Y171	SCC-S34G-A
KV-34FV15K	KOREA	RM-Y149A	SCC-S31B-A
KV-34FV15T	TAIWAN	RM-Y171	SCC-S36A-A
KV-36FV15	U.S.	RM-Y171	SCC-S32G-A
KV-36FV15	CND	RM-Y171	SCC-S33G-A
KV-38FV15K	KOREA	RM-Y149A	SCC-S31C-A
KV-34FX250C	E	RM-Y170	SCC-S34H-A
KV-38FX250	E	RM-Y170	SCC-S34M-A
KV-38FX250C	E	RM-Y170	SCC-S34J-A
KV-38FX250T	TAIWAN	RM-Y170	SCC-S36B-A
KV-32XBR250	U.S.	RM-Y170	SCC-S32E-A
KV-32XBR250	CND	RM-Y170	SCC-S33E-A
KV-36XBR250	U.S.	RM-Y170	SCC-S32F-A
KV-36XBR250	CND	RM-Y170	SCC-S33F-A

CORRECTION-2

Subject: IC002 Part Number Correction

Correct the service manual as shown.
File this correction with the service manual.

TRINITRON® COLOR TV

SONY®

SECTION 8 ELECTRICAL PARTS LIST (PAGE 87)

INCORRECT

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC001	8-752-903-74	IC CXP85856A-024Q	

CORRECT

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC001	☛ 8-752-906-87	CXP85856A-029S	

Sony Corporation
Sony Technology Center
Product Quality Division
Service Promotion Department

English
99HJ74418-01
Printed in U.S.A.

© 1999.8

SERVICE MANUAL AA2W CHASSIS

MODEL	*DEST*	*COMMANDER*	*CHASSIS NO.*
KV-32FS10	*U.S.*	*RM-Y168*	*SCC-S32B-A*
KV-32FS10	*CND*	*RM-Y168*	*SCC-S33B-A*
KV-36FS10	*U.S.*	*RM-Y168*	*SCC-S32C-A*
KV-36FS10	*CND*	*RM-Y168*	*SCC-S33C-A*
KV-32FV15	*U.S.*	*RM-Y171*	*SCC-S32D-A*
KV-32FV15	*CND*	*RM-Y171*	*SCC-S33D-A*
KV-34FV10	*E*	*RM-Y168*	*SCC-S34E-A*
KV-34FV15	*E*	*RM-Y171*	*SCC-S34F-A*
KV-34FV15C	*E*	*RM-Y171*	*SCC-S34G-A*
KV-34FV15K	*KOREA*	*RM-Y149A*	*SCC-S31B-A*
KV-34FV15T	*TAIWAN*	*RM-Y171*	*SCC-S36A-A*
KV-36FV15	*U.S.*	*RM-Y171*	*SCC-S32G-A*
KV-36FV15	*CND*	*RM-Y171*	*SCC-S33G-A*
KV-38FV15K	*KOREA*	*RM-Y149A*	*SCC-S31C-A*
KV-34FX250C	*E*	*RM-Y170*	*SCC-S34H-A*
KV-38FX250	*E*	*RM-Y170*	*SCC-S34M-A*
KV-38FX250C	*E*	*RM-Y170*	*SCC-S34J-A*
KV-38FX250T	*TAIWAN*	*RM-Y170*	*SCC-S36B-A*
KV-32XBR250	*U.S.*	*RM-Y170*	*SCC-S32E-A*
KV-32XBR250	*CND*	*RM-Y170*	*SCC-S33E-A*
KV-36XBR250	*U.S.*	*RM-Y170*	*SCC-S32F-A*
KV-36XBR250	*CND*	*RM-Y170*	*SCC-S33F-A*

CORRECTION-3

SUBJECT: G Board Schematic Correction

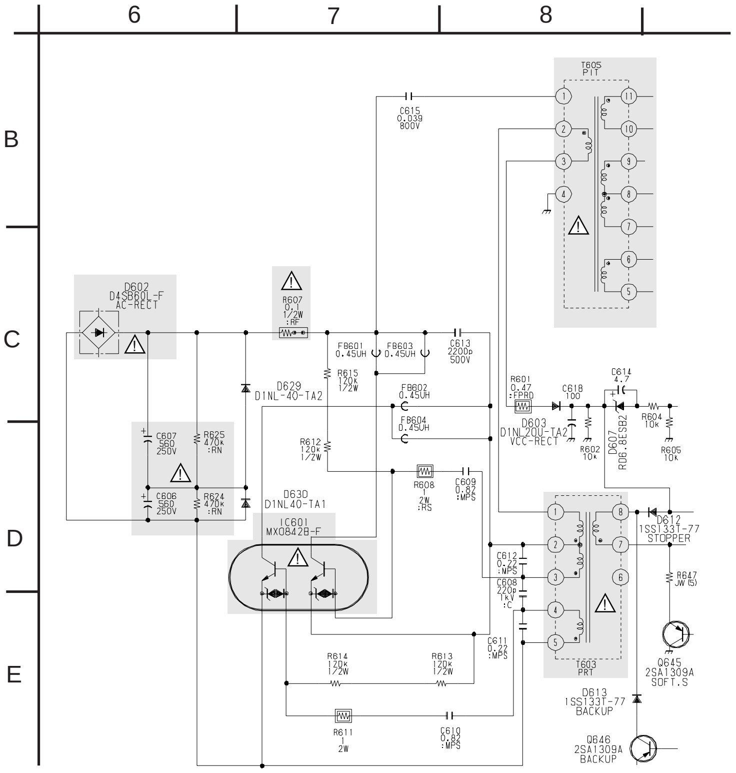
Correct the service manual as shown.
File this Correction with the service manual.

TRINITRON® COLOR TV

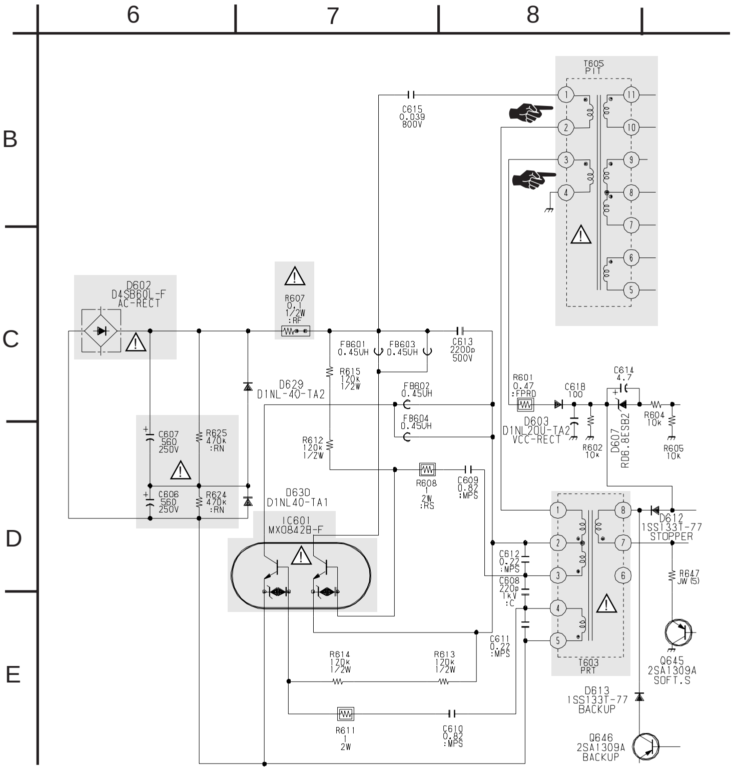
SONY®

Section 6-7: G BOARD SCHEMATIC DIAGRAM PAGE 55
(KV-32FS10/32FV15/32XBR250/34FV15T/36FS10/36FV15/36XBR250/38FX250T ONLY)

Incorrect


6
7
8
B
C
D
E
T605 PIT
C615 0.039 800V
D602 D4SB60L-F AC-RECT
R607 0.1 1/2W :RF
F8601 0.45UH
F8603 0.45UH
C613 2200p 500V
R615 120k 1/2W
D629 D1NL-40-TA2
F8602 0.45UH
F8604 0.45UH
R601 0.47 :FPRD
C618 100
C614 4.7
R604 10k
R605 10k
D603 D1NL20U-TA2 VCC-RECT
R602 10k
D607 RD6.8ESB2
C607 560 250V
R625 470k :RN
R612 120k 1/2W
C606 560 250V
R624 470k :RN
D630 D1NL40-TA1
IC601 MX0842B-F
R608 1 2W :RS
C609 0.82 :MPS
D612 1SS133T-77 STOPPER
C612 0.22 :MPS
C608 220p 1kV :C
R647 JW (5)
C611 0.22 :MPS
T603 PRT
Q645 2SA1309A SOFT.S
R614 120k 1/2W
R613 120k 1/2W
D613 1SS133T-77 BACKUP
R611 1 2W
C610 0.82 :MPS
Q646 2SA1309A BACKUP

Correct


6
7
8
B
C
D
E
T605 PIT
C615 0.039 800V
D602 D4SB60L-F AC-RECT
R607 0.1 1/2W :RF
F8601 0.45UH
F8603 0.45UH
C613 2200p 500V
R615 120k 1/2W
D629 D1NL-40-TA2
F8602 0.45UH
F8604 0.45UH
R601 0.47 :FPRD
C618 100
C614 4.7
R604 10k
R605 10k
D603 D1NL20U-TA2 VCC-RECT
R602 10k
D607 RD6.8ESB2
C607 560 250V
R625 470k :RN
R612 120k 1/2W
C606 560 250V
R624 470k :RN
D630 D1NL40-TA1
IC601 MX0842B-F
R608 1 2W :RS
C609 0.82 :MPS
D612 1SS133T-77 STOPPER
C612 0.22 :MPS
C608 220p 1kV :C
R647 JW (5)
C611 0.22 :MPS
T603 PRT
Q645 2SA1309A SOFT.S
R614 120k 1/2W
R613 120k 1/2W
D613 1SS133T-77 BACKUP
R611 1 2W
C610 0.82 :MPS
Q646 2SA1309A BACKUP

☛: Corrected item

Sony Corporation
Sony Technology Center
Product Quality Division
Service Promotion Department

English
99ET74347-01
Printed in USA
1999.9

9-965-868-93

SERVICE MANUAL

AA2W CHASSIS

MODEL	DEST	COMMANDER	CHASSIS NO.
KV-32FS10	U.S.	RM-Y168	SCC-S32B-A
KV-32FS10	CND	RM-Y168	SCC-S33B-A
KV-36FS10	U.S.	RM-Y168	SCC-S32C-A
KV-36FS10	CND	RM-Y168	SCC-S33C-A
KV-32FV15	U.S.	RM-Y171	SCC-S32D-A
KV-32FV15	CND	RM-Y171	SCC-S33D-A
KV-34FV10	E	RM-Y168	SCC-S34E-A
KV-34FV15	E	RM-Y171	SCC-S34F-A
KV-34FV15C	E	RM-Y171	SCC-S34G-A
KV-34FV15K	KOREA	RM-Y149A	SCC-S31B-A
KV-34FV15T	TAIWAN	RM-Y171	SCC-S36A-A
KV-36FV15	U.S.	RM-Y171	SCC-S32G-A
KV-36FV15	CND	RM-Y171	SCC-S33G-A
KV-38FV15K	KOREA	RM-Y149A	SCC-S31C-A
KV-34FX250C	E	RM-Y170	SCC-S34H-A
KV-38FX250	E	RM-Y170	SCC-S34M-A
KV-38FX250C	E	RM-Y170	SCC-S34J-A
KV-38FX250T	TAIWAN	RM-Y170	SCC-S36B-A
KV-32XBR250	U.S.	RM-Y170	SCC-S32E-A
KV-32XBR250	CND	RM-Y170	SCC-S33E-A
KV-36XBR250	U.S.	RM-Y170	SCC-S32F-A
KV-36XBR250	CND	RM-Y170	SCC-S33F-A

CORRECTION- 4

SUBJECT: Corrections to Set-up Adjustments

Correct the service manual as shown.
File this Correction with the service manual.

TRINITRON® COLOR TV

SONY®

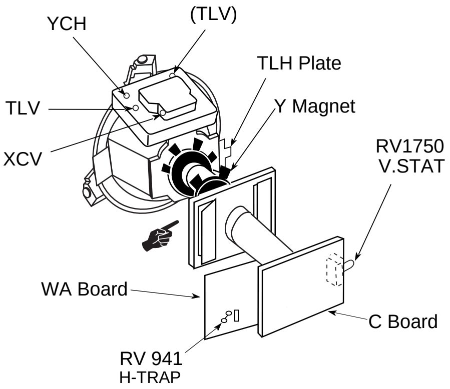
SECTION 3
SET-UP ADJUSTMENTS

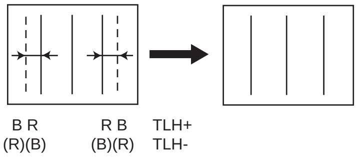
☞: Corrected item

3-2: CONVERGENCE

(4) TLH Plate Adjustment (page 19)

- Input a crosshatch pattern.
- Adjust PICTURE QUALITY to standard, PICTURE and BRIGHTNESS to 50% and OTHER to standard.
- Adjust the Horizontal Convergence of red and blue dots by tilting the TLH plate on the deflection yoke.





1. Adjust XCV core to balance X axis.

2. Adjust YCH VR to balance Y axis.

3. Adjust vertical red and blue convergence with V.TILT (TLV VR.)

Perform adjustments while tracking items 1 and 2.

☞ 4. Adjust Y MAGNET to correct V.BOW Geometry Distortion.

☞ 5. Adjust H-TRAP (VR-941) to correct H.TRAPEZOID Geometry Distortion.

After adjusting items 4 and 5, confirm overall geometry again.

3-4: SCREEN (G2) (page 20)

1. Input dot pattern from the pattern generator.

2. Set the user controls to normal.

☞ 3. Adjust RCUT, GCUT, BCUT, and SBRT in service mode with an oscilloscope so that voltages on the red, green, and blue cathodes are 170 ±2 V DC or with a voltmeter so that cathodes are 176 ±2 V DC.

4. Observe the screen and adjust SCREEN (G2) VR to obtain the fairly visible background of dot signal.

5. Push the TEST +JUMP (+Channel) to cut off the signal, then the screen is bright or dark. Brightness of raster must be increased when adjusting.

6. Adjust screen VR until the screen is just cut off, or scarcely lights up. A signal cannot be seen when the brightness of the raster is high.

7. Push the JUMP again to release the cut off.

SONY CORPORATION
Sony Technology Center
Product Quality Division
Service Promotion Department

9-965-868-94

English
99JJ74347-1
Printed in U.S.A.
© 1999.10

SERVICE MANUAL

AA2W CHASSIS

MODEL	DEST	COMMANDER	CHASSIS NO.
KV-32FS10	U.S.	RM-Y168	SCC-S32B-A
KV-32FS10	CND	RM-Y168	SCC-S33B-A
KV-36FS10	U.S.	RM-Y168	SCC-S32C-A
KV-36FS10	CND	RM-Y168	SCC-S33C-A
KV-32FV15	U.S.	RM-Y171	SCC-S32D-A
KV-32FV15	CND	RM-Y171	SCC-S33D-A
KV-34FV10	E	RM-Y168	SCC-S34E-A
KV-34FV15	E	RM-Y171	SCC-S34F-A
KV-34FV15C	E	RM-Y171	SCC-S34G-A
KV-34FV15K	KOREA	RM-Y149A	SCC-S31B-A
KV-34FV15T	TAIWAN	RM-Y171	SCC-S36A-A
KV-36FV15	U.S.	RM-Y171	SCC-S32G-A
KV-36FV15	CND	RM-Y171	SCC-S33G-A
KV-38FV15K	KOREA	RM-Y149A	SCC-S31C-A
KV-34FX250C	E	RM-Y170	SCC-S34H-A
KV-38FX250	E	RM-Y170	SCC-S34M-A
KV-38FX250C	E	RM-Y170	SCC-S34J-A
KV-38FX250T	TAIWAN	RM-Y170	SCC-S36B-A
KV-32XBR250	U.S.	RM-Y170	SCC-S32E-A
KV-32XBR250	CND	RM-Y170	SCC-S33E-A
KV-36XBR250	U.S.	RM-Y170	SCC-S32F-A
KV-36XBR250	CND	RM-Y170	SCC-S33F-A

CORRECTION- 5

SUBJECT: A Board Schematic Correction

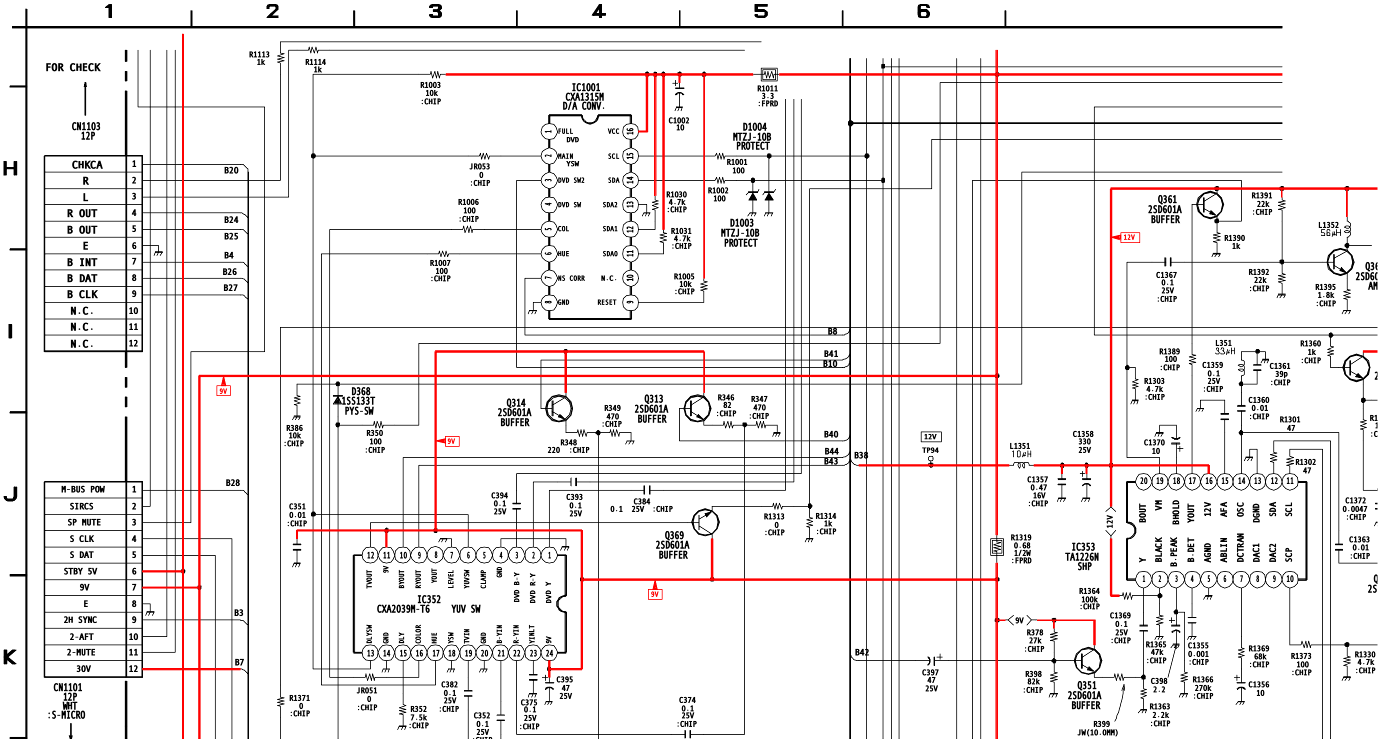
Correct the service manual as shown.
File this Correction with the service manual.

TRINITRON® COLOR TV

SONY®

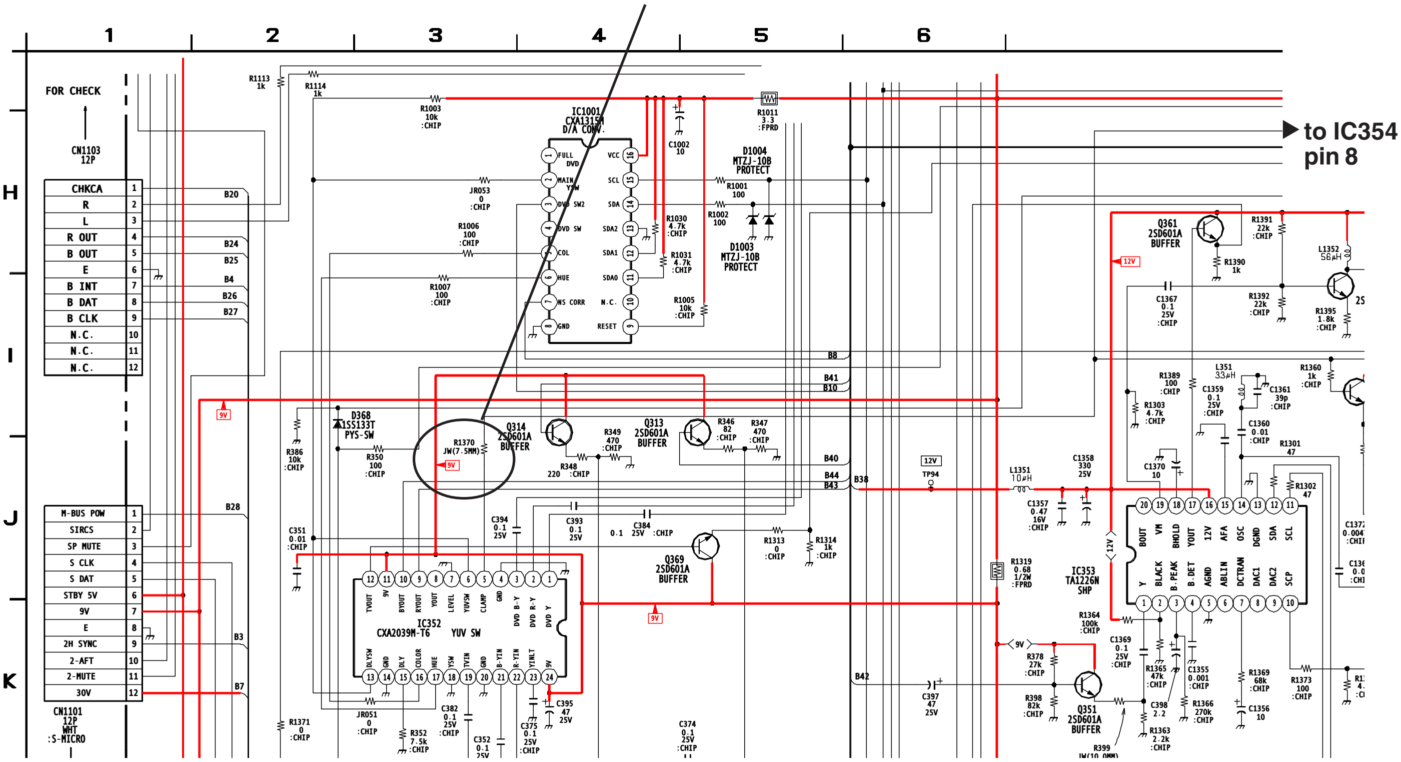
Section 6-7: A BOARD SCHEMATIC DIAGRAM PAGE 45

Incorrect


FOR CHECK
CN1103 12P
CHKCA
IC1001 CXA1315M D/A CONV.
D1004 MTZJ-10B PROTECT
D1003 MTZJ-10B PROTECT
Q361 2SD601A BUFFER
Q314 2SD601A BUFFER
Q313 2SD601A BUFFER
Q369 2SD601A BUFFER
D368 1SS133T PYS-SW
IC352 CXA2039M-T6 YUV SW
IC353 TA1226N SHP
Q351 2SD601A BUFFER
CN1101 12P WHT :S-MICRO

Correct

☛ **R1370 JW 7.5mm added**


to IC354 pin 8
FOR CHECK
CN1103 12P
IC1001 CXA1315M D/A CONV.
R1370 JW(7.5MM)
Q314 2SD601A BUFFER
Q313 2SD601A BUFFER
Q369 2SD601A BUFFER
D368 1SS133T PYS-SW
IC352 CXA2039M-T6 YUV SW
IC353 TA1226N SHP
Q351 2SD601A BUFFER
CN1101 12P WHT :S-MICRO

Sony Corporation
Sony Technology Center
Technical Services
Service Promotion Department

English
2000GJ74347-01
Printed in USA
2000.7

SERVICE MANUAL

AA-2W CHASSIS

MODEL	DEST	COMMANDER	CHASSIS NO.
KV-32FS10	U.S.	RM-Y168	SCC-S32B-A
KV-32FS10	CND	RM-Y168	SCC-S33B-A
KV-36FS10	U.S.	RM-Y168	SCC-S32C-A
KV-36FS10	CND	RM-Y168	SCC-S33C-A
☞ **KV-36FS10**	HAWAII	RM-Y168	SCC-S32HA
KV-32FV15	U.S.	RM-Y171	SCC-S32D-A
KV-32FV15	CND	RM-Y171	SCC-S33D-A
KV-34FV10	E	RM-Y168	SCC-S34E-A
KV-34FV15	E	RM-Y171	SCC-S34F-A
KV-34FV15C	E	RM-Y171	SCC-S34G-A
KV-34FV15K	KOREA	RM-Y149A	SCC-S31B-A
KV-34FV15T	TAIWAN	RM-Y171	SCC-S36A-A
KV-36FV15	U.S.	RM-Y171	SCC-S32G-A
KV-36FV15	CND	RM-Y171	SCC-S33G-A
☞ **KV-36FV15**	HAWAII	RM-Y171	SCC-S32JA
KV-38FV15K	KOREA	RM-Y149A	SCC-S31C-A
KV-34FX250C	E	RM-Y170	SCC-S34H-A
KV-38FX250	E	RM-Y170	SCC-S34M-A
KV-38FX250C	E	RM-Y170	SCC-S34J-A
KV-38FX250T	TAIWAN	RM-Y170	SCC-S36B-A
KV-32XBR250	U.S.	RM-Y170	SCC-S32E-A
KV-32XBR250	CND	RM-Y170	SCC-S33E-A
KV-36XBR250	U.S.	RM-Y170	SCC-S32F-A
KV-36XBR250	CND	RM-Y170	SCC-S33F-A
☞ **KV-36XBR250**	HAWAII	RM-Y170	SCC-S32KA

CORRECTION - 6

SUBJECT: Addition of Hawaiian models; IC001 Part Number Correction; Addition of ITC Assembly P/N for Hawaiian models

Correct the service manual as shown.
File this Correction with the service manual.

☞: **Corrected Item**

TRINITRON® COLOR TV

SONY®

Section7: Exploded View - Page 82
7-3: Picture Tube

Incorrect				Correct			
REF. NO	PART NO.	DESCRIPTION	REMARKS	REF. NO	PART NO.	DESCRIPTION	REMARKS
-----> Needs to be Added				☞ 60 ⚠	8-735-081-61	ITC 38RSN-A1M (Hawaiian models only)	
-----> Needs to be Added				☞ 61 ⚠	8-735-081-05	CRT 38RSN (A90LPW80X) (Hawaiian models only)	
-----> Needs to be Added				☞ 62 ⚠	8-451-506-11	DY Y38RSA-X (Hawaiian models only)	

Section 8: Electrical Parts List - Page 87

Incorrect				Correct			
REF. NO	PART NO.	DESCRIPTION	REMARKS	REF. NO	PART NO.	DESCRIPTION	REMARKS
IC001	8-752-906-87	IC CXP85856A-029S		☞ IC001	8-752-911-19	IC CXP85856A-035S	

Sony Corporation
Sony Technology Center
Technical Services
Service Promotion Department

9-965-868-96

English
2001AJ74340-01
Printed in USA
2001.1

SERVICE MANUAL AA-2W CHASSIS

MODEL	DEST	COMMANDER	CHASSIS NO.
KV-32FS10	U.S.	RM-Y168	SCC-S32B-A
KV-32FS10	CND	RM-Y168	SCC-S33B-A
KV-36FS10	U.S.	RM-Y168	SCC-S32C-A
KV-36FS10	CND	RM-Y168	SCC-S33C-A
KV-36FS10	HAWAII	RM-Y168	SCC-S32HA
KV-32FV15	U.S.	RM-Y171	SCC-S32D-A
KV-32FV15	CND	RM-Y171	SCC-S33D-A
KV-34FV10	E	RM-Y168	SCC-S34E-A
KV-34FV15	E	RM-Y171	SCC-S34F-A
KV-34FV15C	E	RM-Y171	SCC-S34G-A
KV-34FV15K	KOREA	RM-Y149A	SCC-S31B-A
KV-34FV15T	TAIWAN	RM-Y171	SCC-S36A-A
KV-36FV15	U.S.	RM-Y171	SCC-S32G-A
KV-36FV15	CND	RM-Y171	SCC-S33G-A
KV-36FV15	HAWAII	RM-Y171	SCC-S32JA
KV-38FV15K	KOREA	RM-Y149A	SCC-S31C-A
KV-34FX250C	E	RM-Y170	SCC-S34H-A
KV-38FX250	E	RM-Y170	SCC-S34M-A
KV-38FX250C	E	RM-Y170	SCC-S34J-A
KV-38FX250T	TAIWAN	RM-Y170	SCC-S36B-A
KV-32XBR250	U.S.	RM-Y170	SCC-S32E-A
KV-32XBR250	CND	RM-Y170	SCC-S33E-A
KV-36XBR250	U.S.	RM-Y170	SCC-S32F-A
KV-36XBR250	CND	RM-Y170	SCC-S33F-A
KV-36XBR250	HAWAII	RM-Y170	SCC-S32KA

CORRECTION - 7

SUBJECT: Tuner and Terminal labels for rear cover must be ordered separately using the part numbers provided on this correction sheet.

Correct the service manual as shown.
File this Correction with the service manual.

TRINITRON® COLOR TV

SONY®

Section 7: Exploded View - Page 80

7-2: CHASSIS (36” - 38” models only)

☛ : Corrected Item

Incorrect				Correct		
REF NO.	PART NO.	DESCRIPTION		REF NO.	PART NO.	DESCRIPTION
20	4-068-998-01	COVER, REAR	☛	20	4-068-998-03	COVER, REAR (**SEE NOTE BELOW)
Not Listed -----> Needs to be Added			☛	21	4-070-354-01	TUNER TERMINAL LABEL (KV-36FS10)
					4-070-353-01	TUNER TERMINAL LABEL (except KV-35FS10)
Not Listed -----> Needs to be Added			☛	22	4-070-352-51	TERMINAL LABEL (KV-36FS10)
					4-070-352-31	TERMINAL LABEL (KV-36FV15, 38FV15K)
					4-070-352-41	TERMINAL LABEL (KV-36XBR250, 38FX250/A/C/T)

**** The rear cover does not include any terminal labels. These labels (items 21 and 22) must be ordered separately when ordering a replacement rear cover.**

Sony Corporation
Sony Technology Center
Technical Services
Service Promotion Department

9-965-868-97

English
2001AJ74-DATA
Printed in USA
2001.2

SERVICE MANUAL AA-2W CHASSIS

MODEL	DEST	COMMANDER	CHASSIS NO.
KV-32FS10	U.S.	RM-Y168	SCC-S32B-A
KV-32FS10	CND	RM-Y168	SCC-S33B-A
KV-36FS10	U.S.	RM-Y168	SCC-S32C-A
KV-36FS10	CND	RM-Y168	SCC-S33C-A
KV-32FV15	U.S.	RM-Y171	SCC-S32D-A
KV-32FV15	CND	RM-Y171	SCC-S33D-A
KV-34FV10	E	RM-Y168	SCC-S34E-A
KV-34FV15	E	RM-Y171	SCC-S34F-A
KV-34FV15C	E	RM-Y171	SCC-S34G-A
KV-34FV15K	KOREA	RM-Y149A	SCC-S31B-A
KV-34FV15T	TAIWAN	RM-Y171	SCC-S36A-A
KV-36FV15	U.S.	RM-Y171	SCC-S32G-A
KV-36FV15	CND	RM-Y171	SCC-S33G-A
KV-38FV15K	KOREA	RM-Y149A	SCC-S31C-A
KV-34FX250C	E	RM-Y170	SCC-S34H-A
KV-38FX250	E	RM-Y170	SCC-S34M-A
KV-38FX250C	E	RM-Y170	SCC-S34J-A
KV-38FX250T	TAIWAN	RM-Y170	SCC-S36B-A
KV-32XBR250	U.S.	RM-Y170	SCC-S32E-A
KV-32XBR250	CND	RM-Y170	SCC-S33E-A
KV-36XBR250	U.S.	RM-Y170	SCC-S32F-A
KV-36XBR250	CND	RM-Y170	SCC-S33F-A

SUPPLEMENT - 1

SUBJECT: HZ Board, Picture Tube View and Electrical Parts List Update
(Affects KV-34FV15K, 38FV15K only)

Correct the service manual as shown.
File this Correction with the service manual.

☞ : **Modified Items**

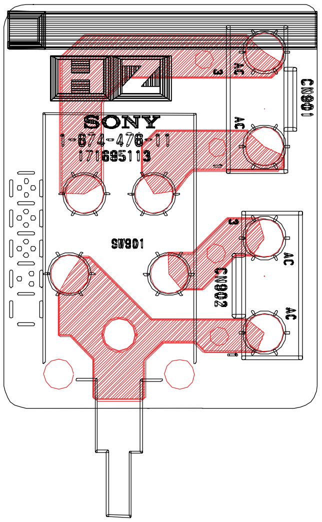
TRINITRON® COLOR TV

SONY®

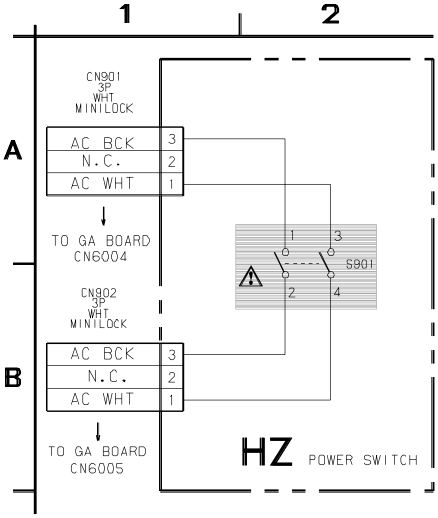
☞ : Modified Items

Section 6-7. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS (KV-34FV15K and KV-38FV15K only)

☞ **HZ** **[POWER SWITCH]**

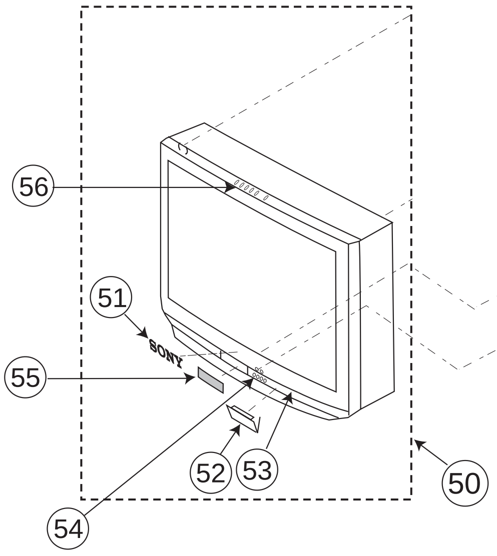

SONY
1-674-476-11
171695113
S901
CN901
CN902
AC
3
1

☞ **HZ Board Schematic Diagram**

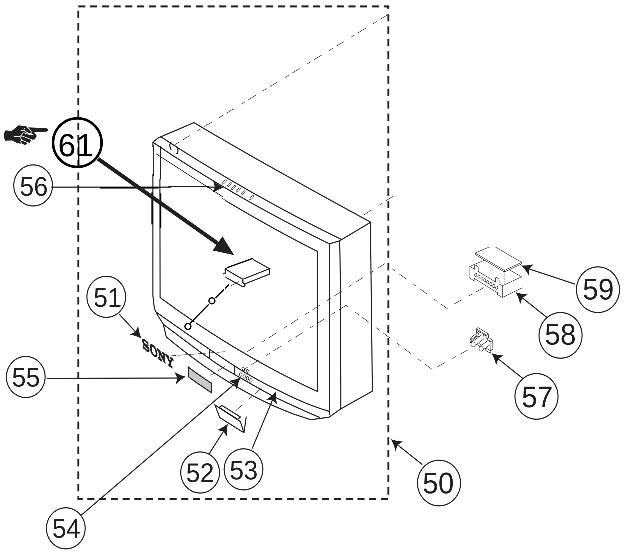

1
2
A
B
CN901
3P
WHT
MINILOCK
AC BCK 3
N.C. 2
AC WHT 1
TO GA BOARD
CN6004
CN902
3P
WHT
MINILOCK
AC BCK 3
N.C. 2
AC WHT 1
TO GA BOARD
CN6005
1
3
2
4
S901
HZ
POWER SWITCH

Section 7-3. PICTURE TUBE (Page 81)

Incorrect


56
51
55
52
53
54
50
59
58
57
SONY

Correct


☞ 61
56
51
55
52
53
54
50
59
58
57
SONY

Ref. No	Part No.	Description	Remarks
50	X-4036-679-2	BEZNET ASSY (KV-34FV15K only)	51-53
50	X-4036-684-1	BEZNET ASSY (KV-38FV15K only)	51-53

Needs to be added - - - - - - - - - - - - - - - - >

Ref. No.	Part No.	Description	Remarks
☞ 50	X-4036-811-2	BEZNET ASSY (KV-34FV15K only)	51-53
☞ 50	X-4037-186-2	BEZNET ASSY (KV-38FV15K only)	51-53
☞ 61	4-068-995-01	BUTTON, MAIN POWER	

☛ : Modified Items

Section 8. ELECTRICAL PARTS LIST

HZ

☛ *** A-1372-667-A** **HZ BOARD, COMPLETE**
(KV-34FV15K, 38FV15K only)

CONNECTOR

CN901*	1-573-963-11	PIN, CONNECTOR (PC BOARD)	3P
CN902*	1-573-963-11	PIN, CONNECTOR (PC BOARD)	3P

SWITCH

SW901⚠	1-571-433-21	SWITCH, PUSH (AC POWER)

Sony Corporation
Sony Technology Center
Product Quality Division
Service Promotion Department

English
99LJ74340-01
Printed in USA
1999.12

9-965-868-81

SERVICE MANUAL

AA-2W CHASSIS

MODEL NAME	DESTINATION	REMOTE COMMANDER	CHASSIS NO.
KV-32FS10	U.S.	RM-Y168	SCC-S32B-A
KV-32FS10	CND	RM-Y168	SCC-S33B-A
KV-36FS10	U.S.	RM-Y168	SCC-S32C-A
KV-36FS10	CND	RM-Y168	SCC-S33C-A
KV-36FS10	HAWAII	RM-Y168	SCC-S32HA
KV-32FV15	U.S.	RM-Y171	SCC-S32D-A
KV-32FV15	CND	RM-Y171	SCC-S33D-A
KV-34FV10	E	RM-Y168	SCC-S34E-A
KV-34FV15	E	RM-Y171	SCC-S34F-A
KV-34FV15C	E	RM-Y171	SCC-S34G-A
KV-34FV15K	KOREA	RM-Y149A	SCC-S31B-A
KV-34FV15T	TAIWAN	RM-Y171	SCC-S36A-A
KV-36FV15	U.S.	RM-Y171	SCC-S32G-A
KV-36FV15	CND	RM-Y171	SCC-S33G-A
KV-36FV15	HAWAII	RM-Y171	SCC-S32JA
KV-38FV15K	KOREA	RM-Y149A	SCC-S31C-A
KV-34FX250C	E	RM-Y170	SCC-S34H-A
KV-38FX250	E	RM-Y170	SCC-S34M-A
KV-38FX250C	E	RM-Y170	SCC-S34J-A
KV-38FX250T	TAIWAN	RM-Y170	SCC-S36B-A
KV-32XBR250	U.S.	RM-Y170	SCC-S32E-A
KV-32XBR250	CND	RM-Y170	SCC-S33E-A
KV-36XBR250	U.S.	RM-Y170	SCC-S32F-A
KV-36XBR250	CND	RM-Y170	SCC-S33F-A
KV-36XBR250	HAWAII	RM-Y170	SCC-S32KA

CORRECTION - 1

SUBJECT: PART NUMBER CORRECTION

Correct the service manual as shown.
File this Correction with the service manual.

9-965-868-98

☛ : Corrected Item

Section 8: Electrical Parts List (Page 98)

INCORRECT

REF. NO.	PART NO.	DESCRIPTION
IC643	1-810-051-11	POWER MODULE DM-48

CORRECT

	REF. NO.	PART NO.	DESCRIPTION
☛	IC643	8-749-012-13	POWER MODULE DM-58

Sony Corporation
Sony Technology Center
Technical Services
Service Promotion Department

9-965-868-98

English
2002HJ74WEB-1
Printed in USA
© 2002.8